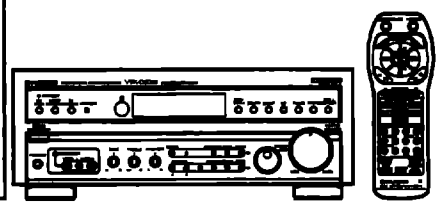
PIONEER®
The Art of Entertainment

Service Manual



ORDER NO.
RRV1746

AUDIO/VIDEO STEREO RECEIVER

VSX-D606S

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	VSX-D606S		
KUXJ I	O	AC120V	
KCXJ I	O	AC120V	

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

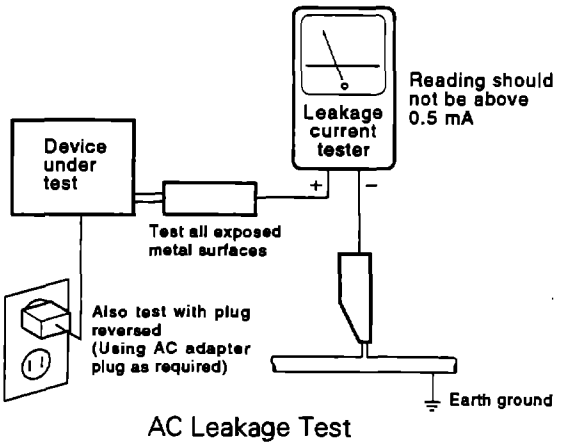
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Leakage current tester
Reading should not be above 0.5 mA
Device under test
+
–
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage , etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

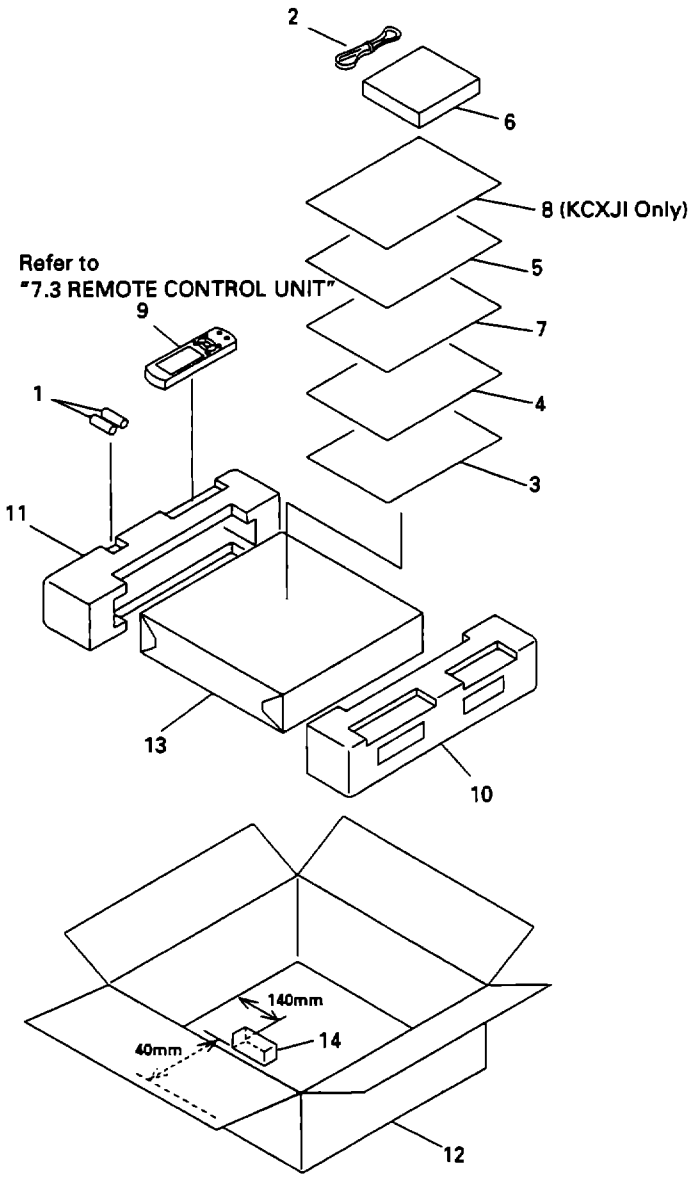
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

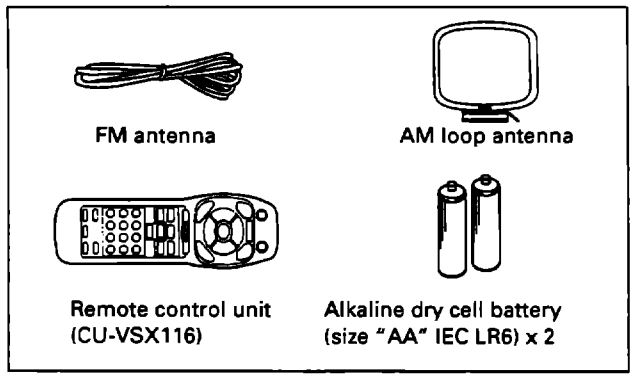
NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING



(1) PARTS LIST

Mark	No.	Description	Parts No.
	1	Alkaline Dry Cell Battery (LR6,AA)	AEX1007
	2	FM Antenna	ADH7004
	3	Operating Instructions (English)	ARB7091
	4	Sub Instruction Manual (Remote Control Unit) (English)	ARH7015
NSP	5	Warranty Card	See Contrast table (2)
	6	AM Loop Antenna	ATB7009
	7	Sub Instruction Manual (AC-3) (English)	ARH7016
	8	Operating Instructions (French)	See Contrast table (2)
	9	Remote Control Unit (CU-VSX116)	AXD7106
	10	Front Pad	AHA7137
	11	Rear Pad	AHA7140
	12	Packing Case	AHD7358
	13	Packing Sheet	AHG7010
	14	Sub Pad B	AHB7027

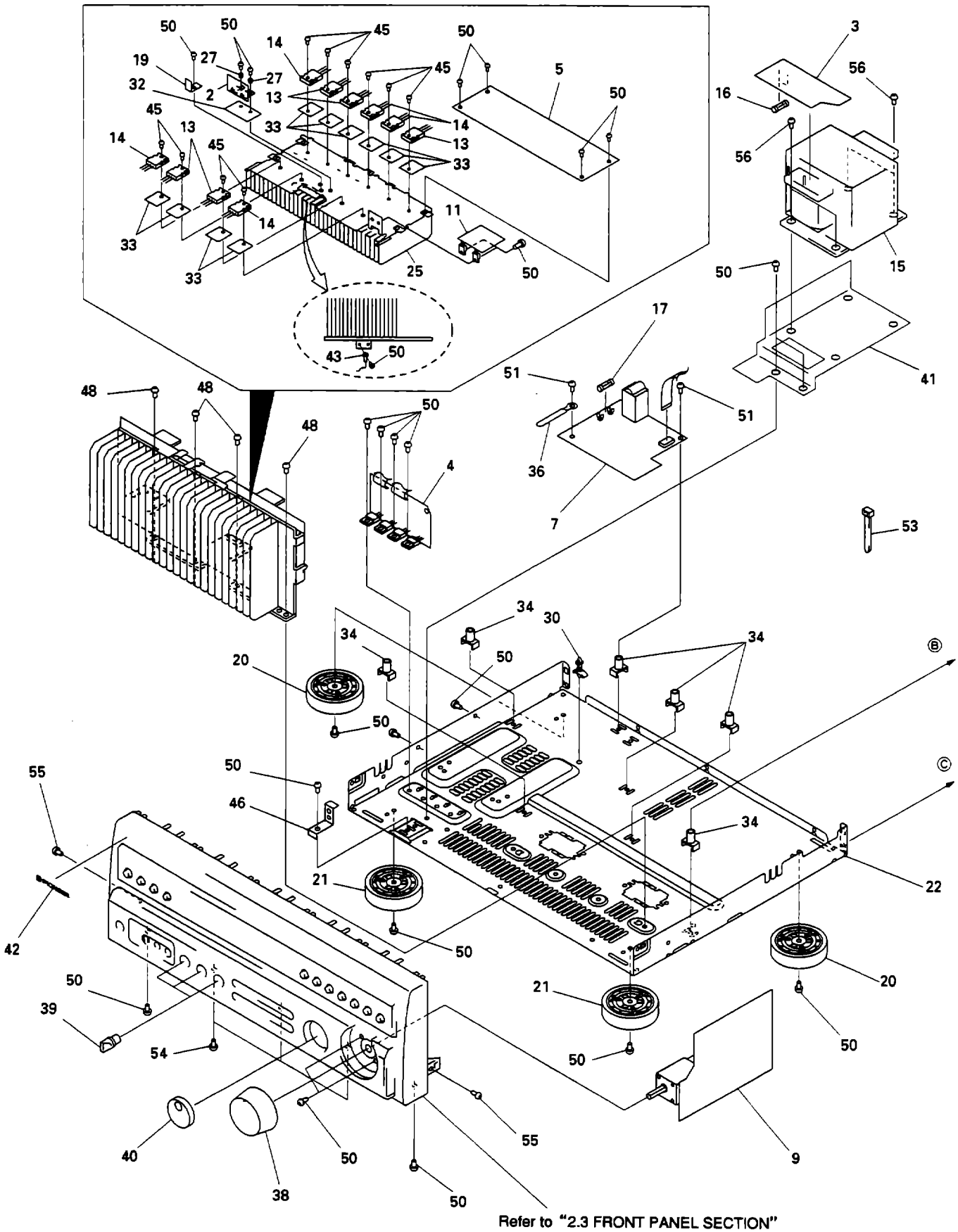


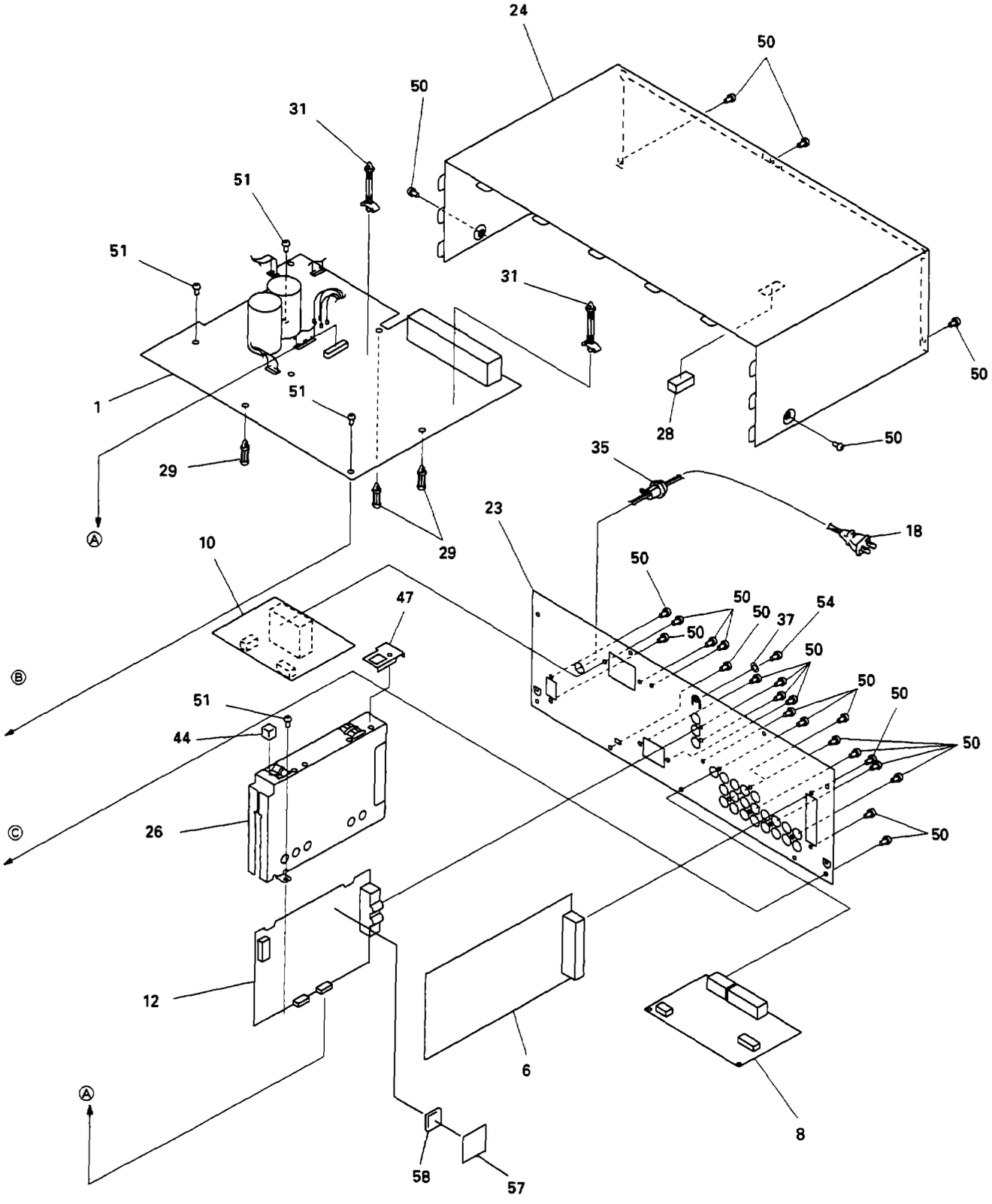
(2) CONTRAST TABLE

VSX-D606S/KUXJI and KCXJI have the same construction except for the following :

Mark	No.	Srmbol & Description	Part No.		Remarks
			VSX-D606S		
			KUXJI	KCXJI	
NSP	5	Warranty Card	ARY1051	ARY1075	
	8	Operating Instructions (French)	Not used	ARC7141	

2.2 EXTERIOR




24
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31
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1
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28
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29
35
29
23
18
10
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47
50
50
37
54
50
51
50
50
44
50
26
50
12
6
8
58
57

VSX-D606S

(1) PARTS LIST

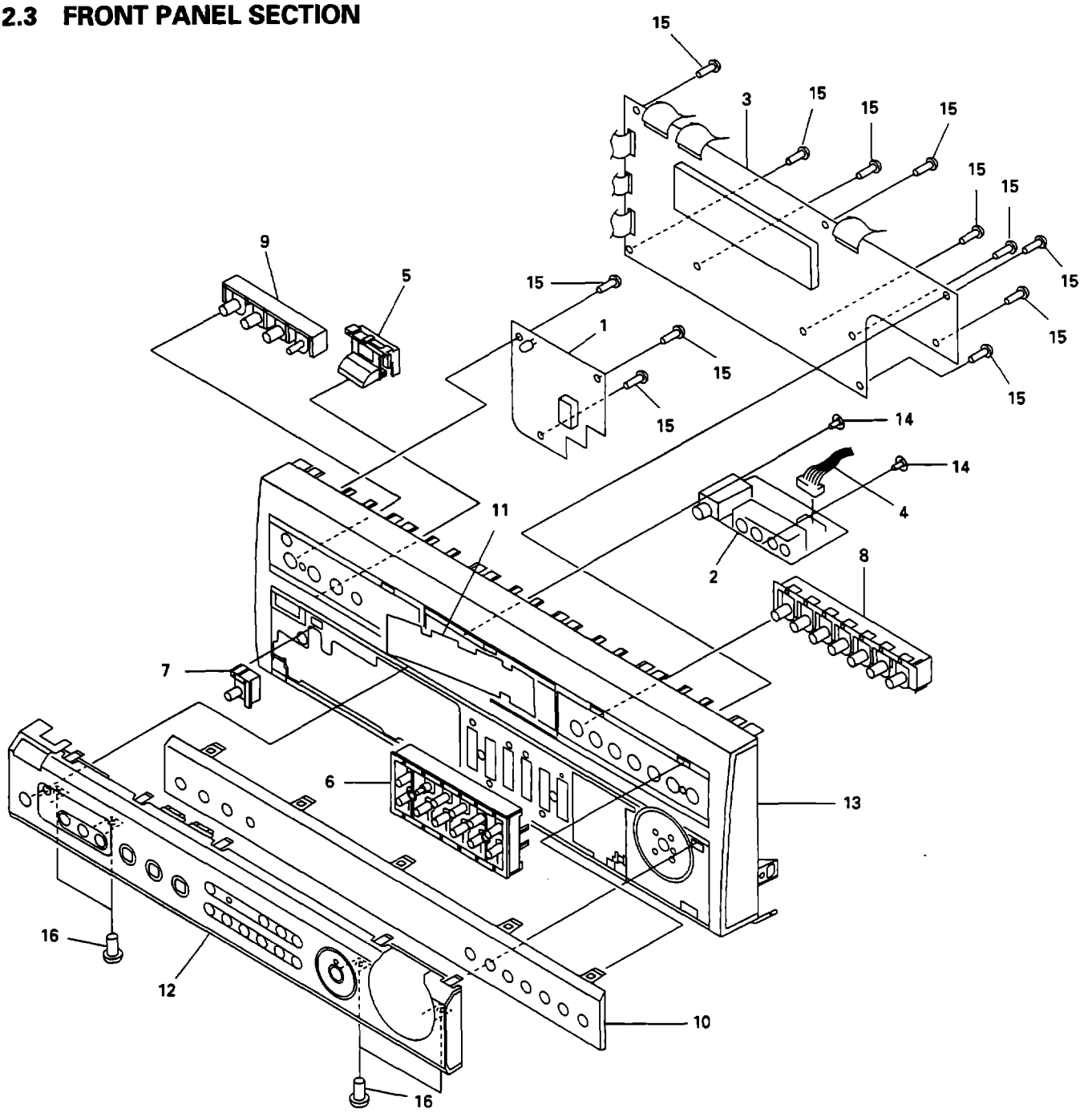
Mark	No.	Description	Parts No.
	1	INPUT ASSY	AWZ8495
NSP	2	MOS FET ASSY	AWZ8497
	3	TRANS ASSY	AWZ8496
	4	REG.1 ASSY	AWZ8507
	5	R/C AMP ASSY	AWZ8504
	6	FM/AM TUNER MOJULE	AXQ7219
NSP	7	PRIMARY ASSY	AWZ8865
	8	VIDEO/SR ASSY	AWZ8509
	9	VOLUME ASSY	AWZ8508
	10	R/C SPEAKER ASSY	AWZ8505
	11	REG.2 ASSY	AWZ8498
	12	DOLBY DIGITAL ASSY	AWX7036
⚠	13	Transistor	2SA1962
⚠	14	Transistor	2SC5242
⚠	15	Power Transformer (AC120V)	ATS7161
⚠	16	Fuse (FU3-FU5 : 1.6A)	REK1077
⚠	17	Fuse (FU1 : 6.3A)	REK1085
⚠	18	AC Power Cord	PDG1015
	19	FET Plate	ANG7124
	20	Leg Assy	AMR2634
	21	Leg Assy	AMR2633
	22	Chassis	ANA7052
	23	Rear Panel	See Contrast table (2)
	24	Bonnet Case	ANE7136
	25	Radiator	ANH7050
	26	Shield Case	ANK7026
NSP	27	Bushing	AEC1402
NSP	28	Cushion	AEB7076
	29	PCB Support	AEC1581
	30	PCB Support	AEC7006
	31	PCB Support	AEC7056
	32	Sheet	AEE1028
	33	Sheet	AEE7010
	34	PCB Mold	AMR2533
	35	Cord Stopper	CM-22C
NSP	36	Clamper	RNE1277
	37	Washer	VEC1254
	38	Round Knob L	AAB7082
	39	Round Knob S	AAB7106
	40	Jog Knob	AAB7048
	41	Trans Flame	ANG7140
	42	Name Plate	PAM1608
NSP	43	Cord with Plug (J105)	DE012CD0
NSP	44	Cushion	AEB7081
	45	Screw	ABA1037
	46	PCB Stopper	ANG7136
	47	ISO Plate	ANG7141
	48	Screw	ABA7019
	49	.....	
	50	Screw	BBZ30P080FZK
	51	Screw	BBZ30P200FMC
	52	.....	
NSP	53	Binder	ZCA-BK1
	54	Screw	ABA7008
	55	Screw	ABA-298
	56	Screw	ABA1147
NSP	57	DIR RESET SW ASSY	AWX7048
NSP	58	SPACER	AEC7090

(2) CONTRAST TABLE

VSX-D606S/KUXJI and KCXJI have the same construction except for the following :

Mark	No.	Srmbol & Description	Part No.		Remarks
			VSX-D606S		
			KUXJI	KCXJI	
	23	Rear Panel	ANC7480	ANC7522	

2.3 FRONT PANEL SECTION

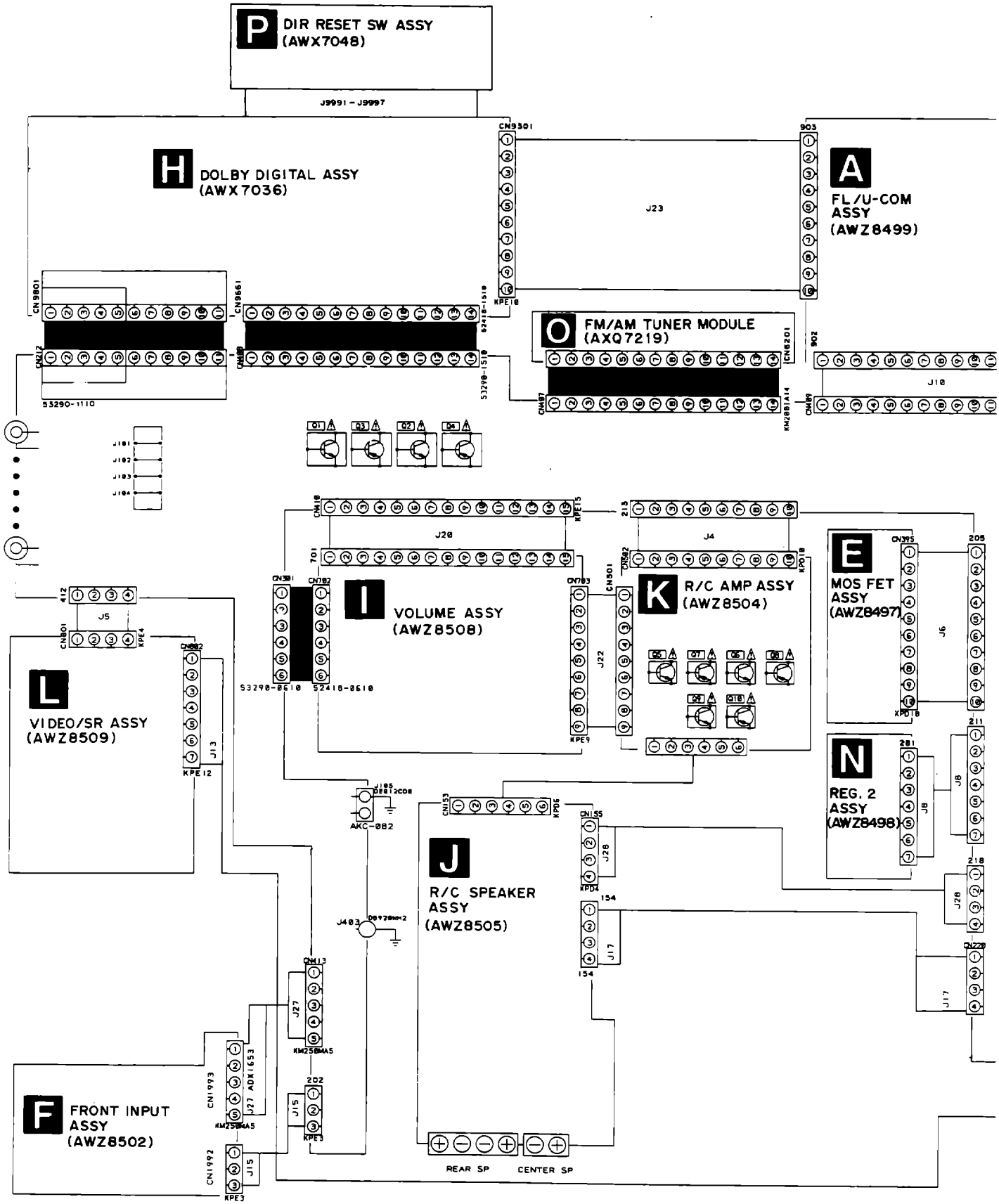


• PARTS LIST

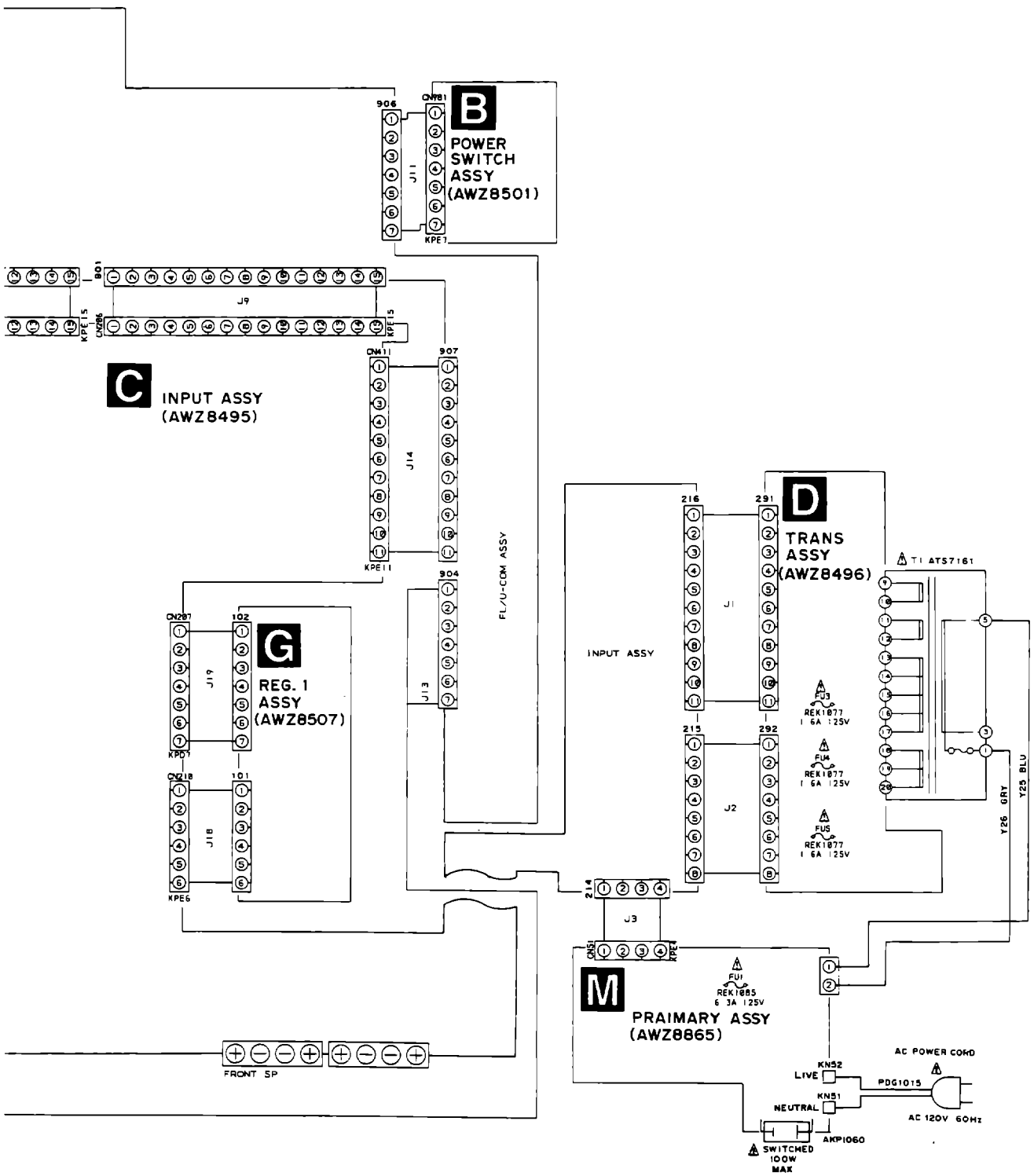
Mark	No.	Description	Parts No.
NSP	1	Power Switch ASSY	AWZ8501
NSP	2	Front Input ASSY	AWZ8502
	3	FL U-COM ASSY	AWZ8499
NSP	4	Housing 5P Shield	ADX1653
	5	Power Button	AAD7325
	6	Tuner Button	AAD7326
	7	Input Button	AAD7327
	8	Func. Button	AAD7328
	9	SFC Button	AAD7329
	10	FL Panel	AAK7295
	11	FL Filter	AAK7294
	12	Sub Panel	AAP7025
	13	Front Panel	AMB7391
	14	Screw	ABA7009
	15	Screw	BPZ30P080FMC
	16	Screw	BBZ30P080FZK

3. SCHEMATIC DIAGRAM

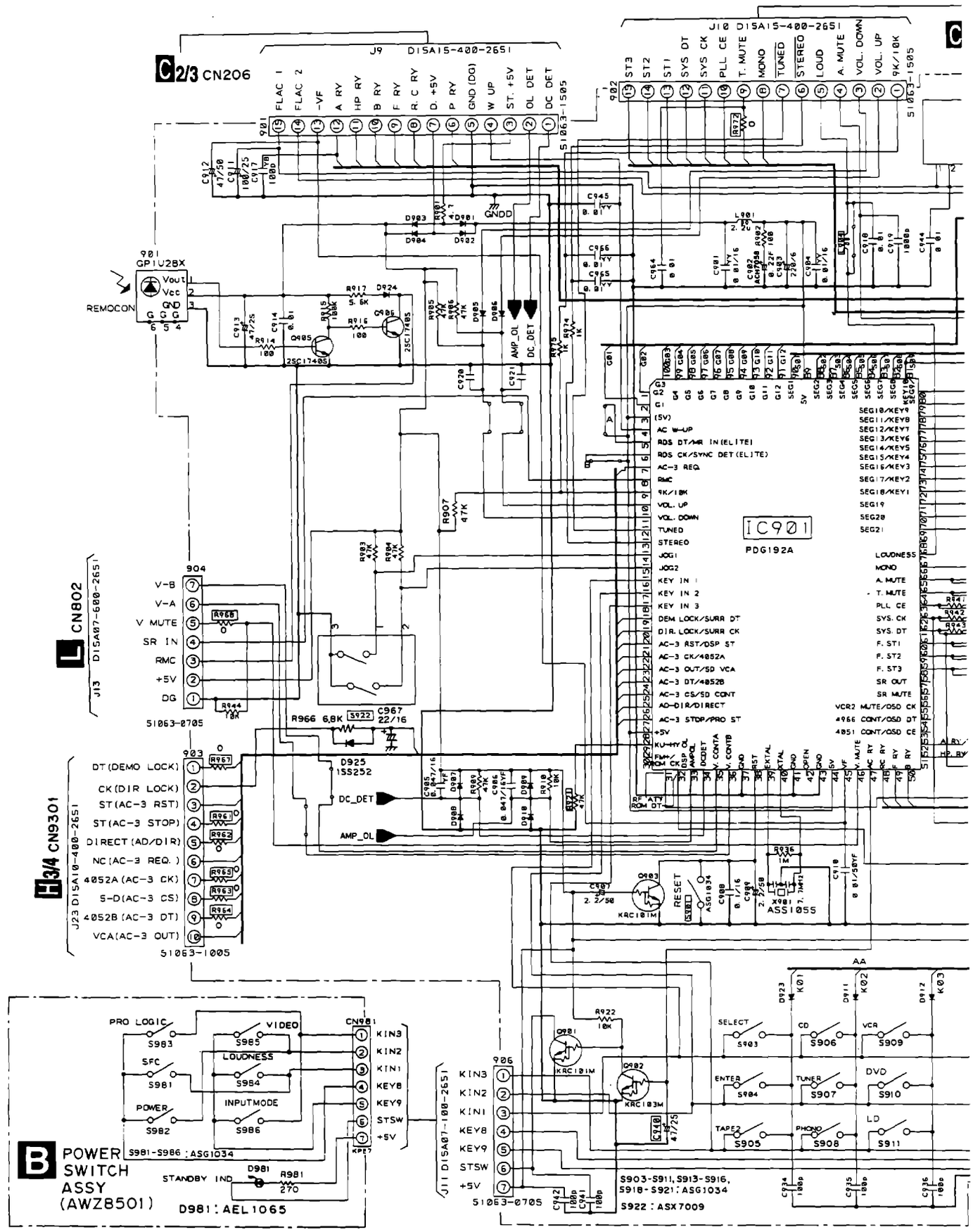
3.1 OVERALL CONNECTION DIAGRAM



NOTE: When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".



3.2 FL/U-COM ASSY AND POWER SWITCH ASSY

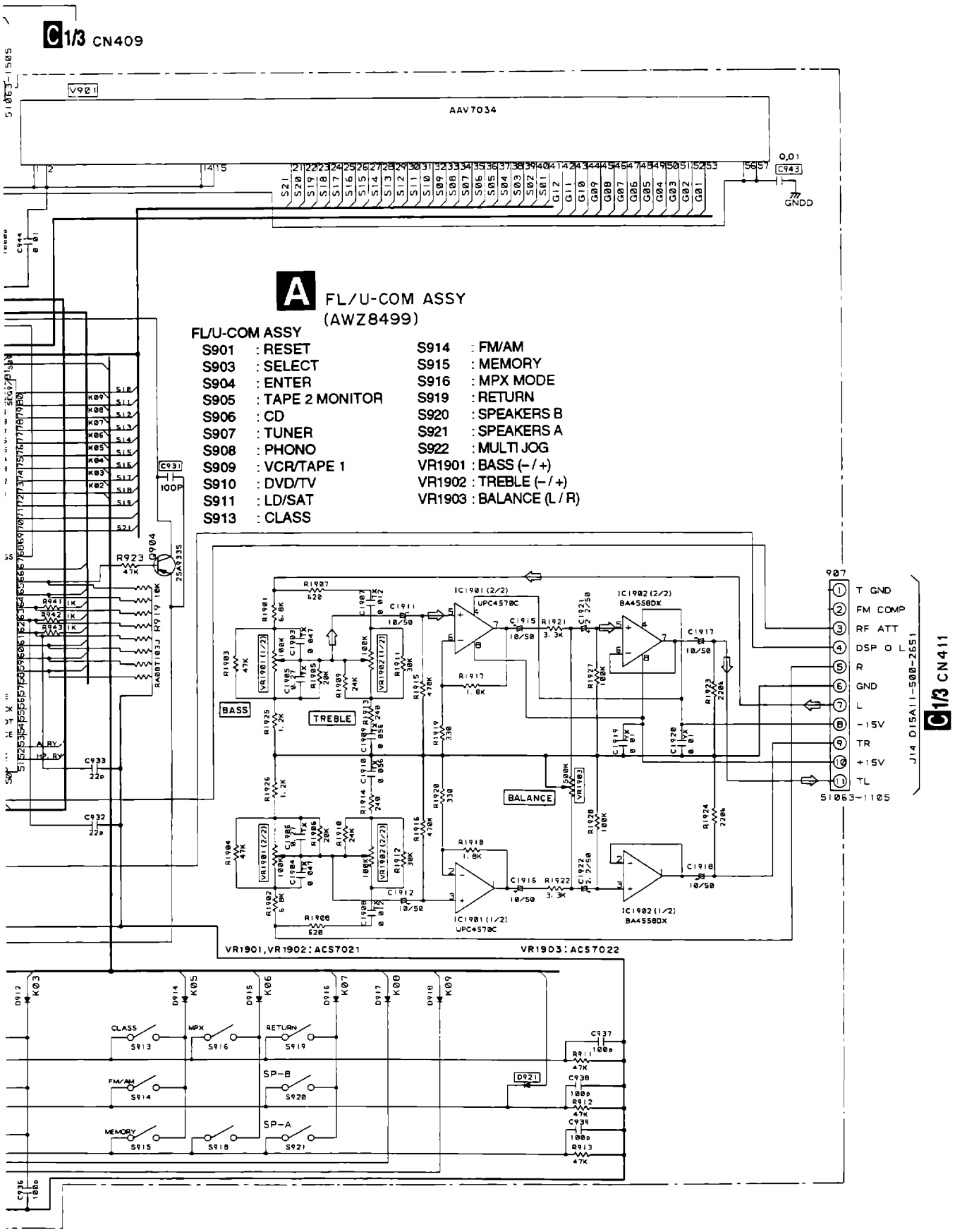


POWER SW ASSY

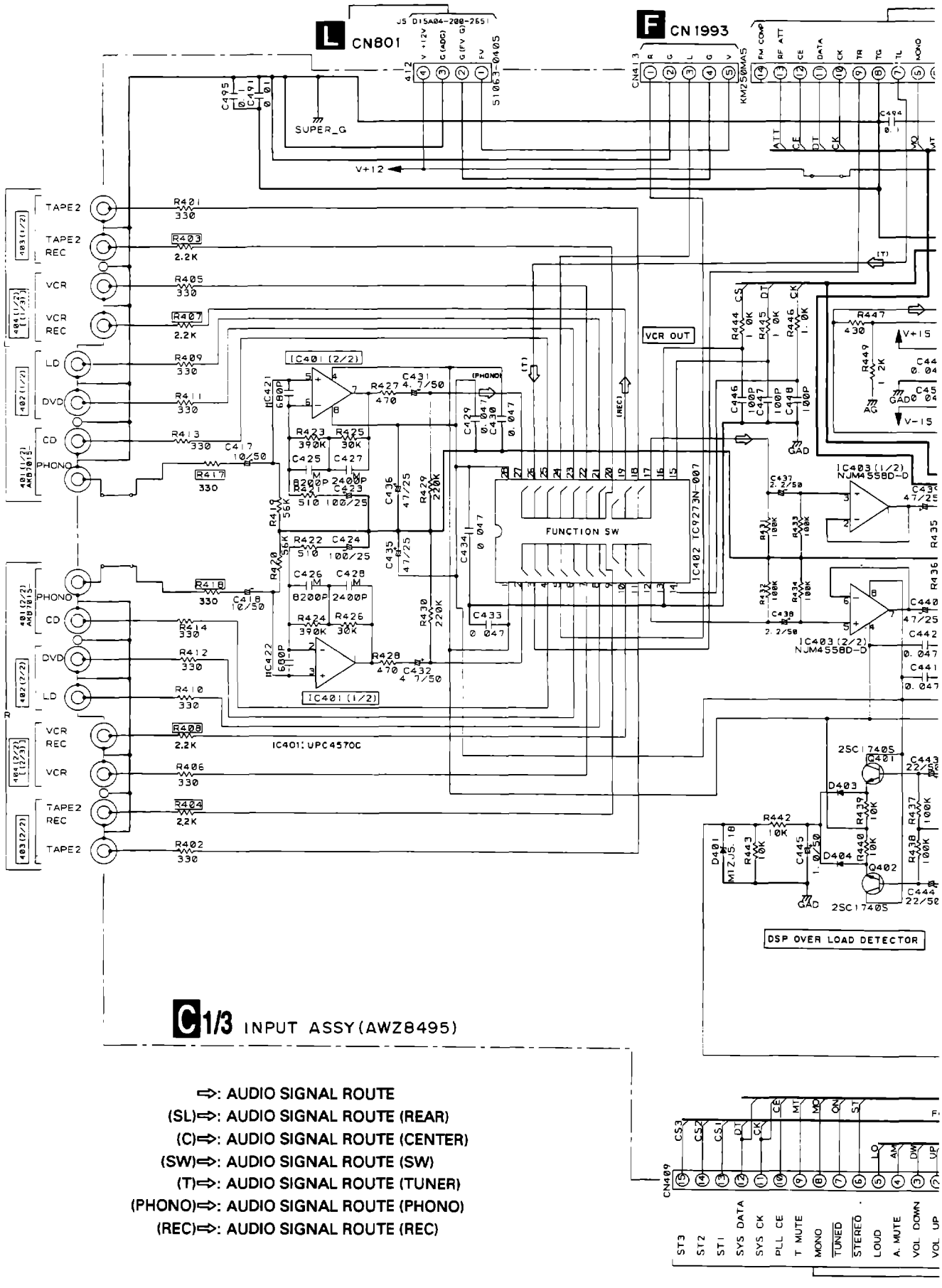
S981	: DSP MODE	S984	: LOUDNESS
S982	: POWER STANDBY/ON	S985	: VIDEO INPUT
S983	: DOLBY	S986	: SIGNAL SELECT

A B

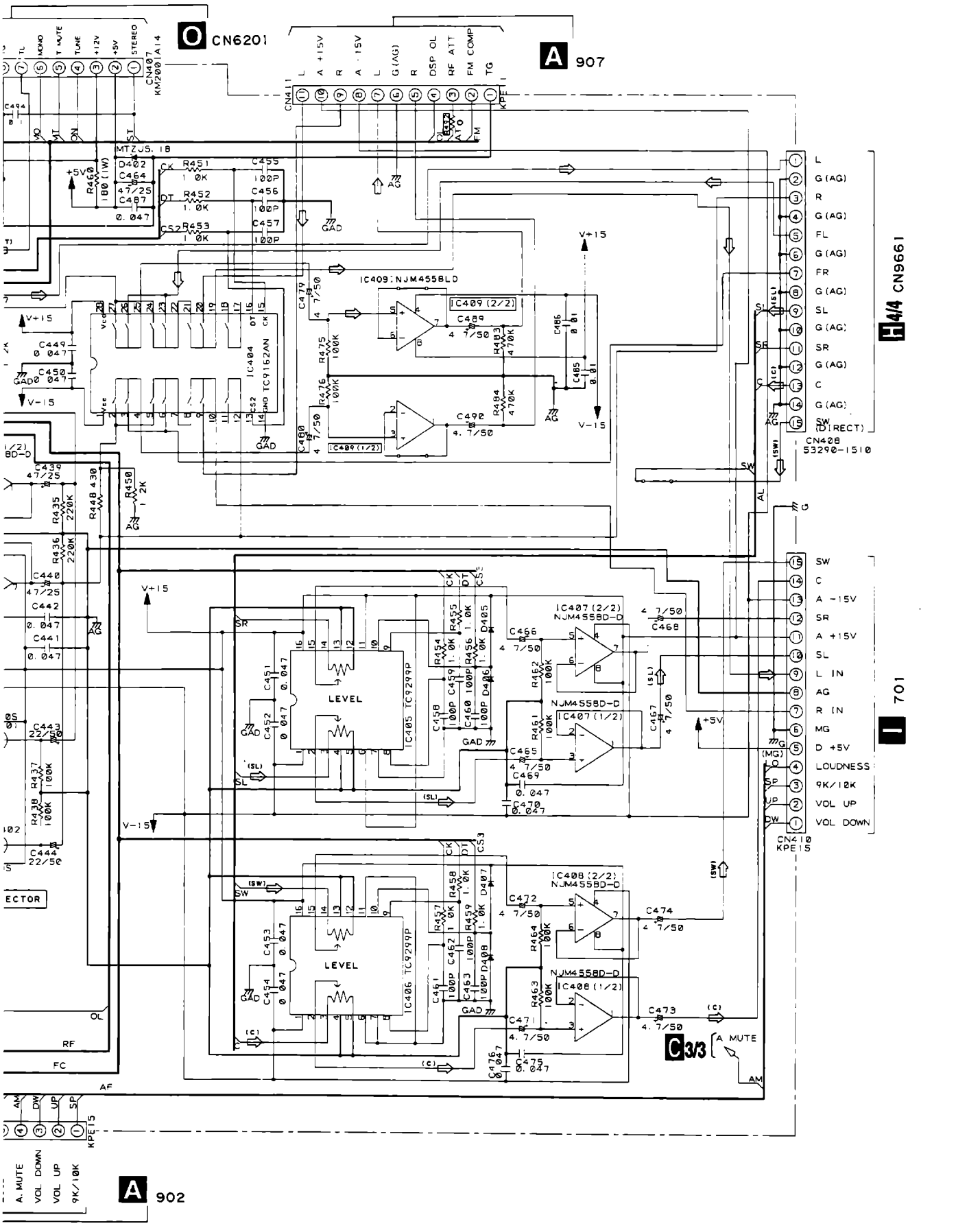
⇨: AUDIO SIGNAL ROUTE



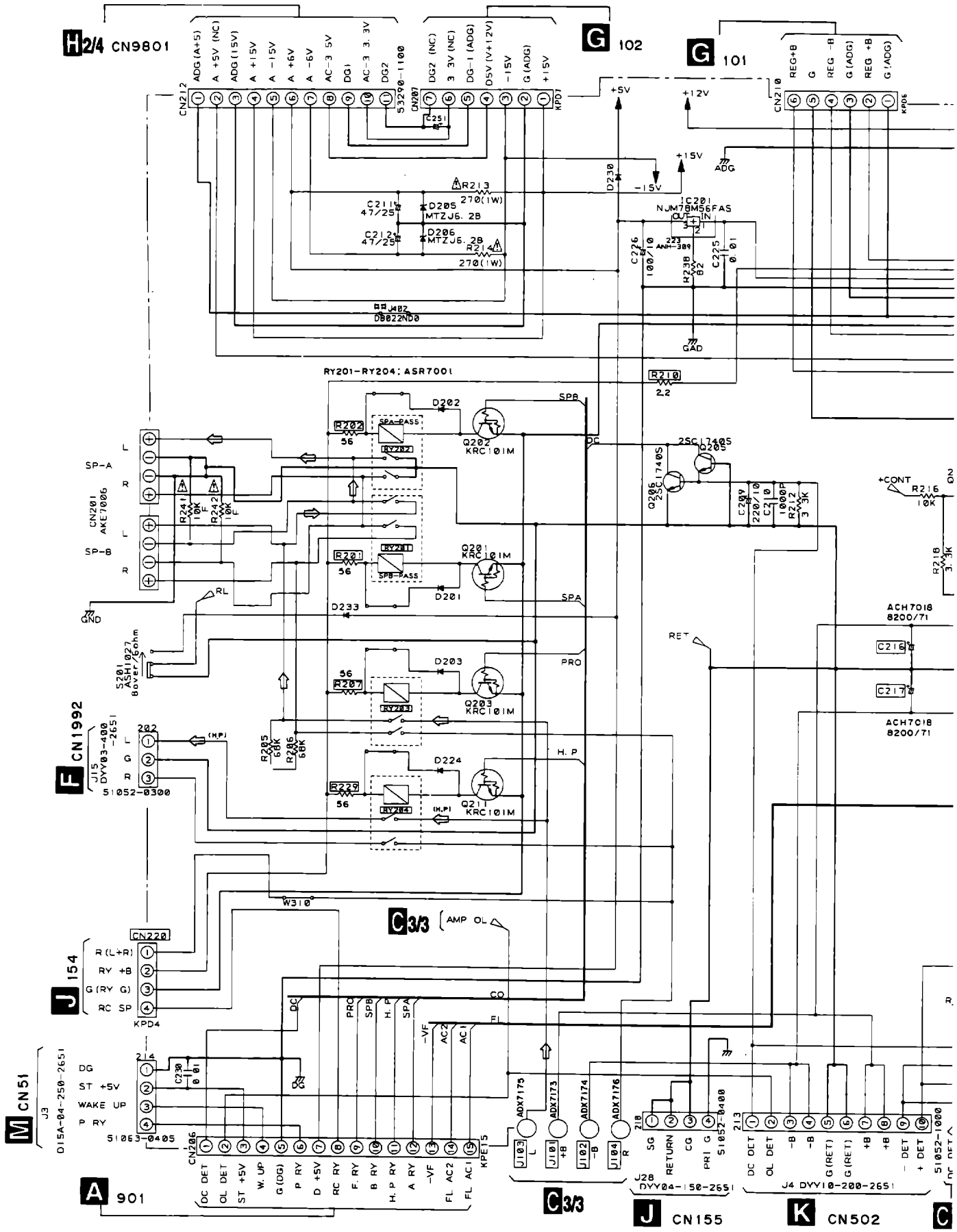
VSX-D606S
3.3 INPUT ASSY (1/3)



⇨: AUDIO SIGNAL ROUTE
(SL)⇨: AUDIO SIGNAL ROUTE (REAR)
(C)⇨: AUDIO SIGNAL ROUTE (CENTER)
(SW)⇨: AUDIO SIGNAL ROUTE (SW)
(T)⇨: AUDIO SIGNAL ROUTE (TUNER)
(PHONO)⇨: AUDIO SIGNAL ROUTE (PHONO)
(REC)⇨: AUDIO SIGNAL ROUTE (REC)


O CN6201
A 907
CN411
L
A +15V
R
A -15V
L
G (AG)
R
DSP OL
RF ATT
FM COMP
TG
KPE15
CN407
KM200 A14
TL
MONO
T MUTE
TUNE
+12V
+5V
STEREO
MT
ON
ST
MTZJ5.1B
D402
C464
47/25
C487
0.047
+5V
R460
180 (1W)
CK
DT
CS2
R451
R452
R453
1.0K
C455
C456
C457
100P
GAD
AG
V+15
V-15
IC409:NJM4558LD
IC409 (2/2)
IC409 (1/2)
C479
C489
C490
4.7/50
R475
R476
100K
R483
R484
470K
C485
C486
0.01
IC404
TC9162AN
C449
C450
0.047
C439
47/25
R435
R436
220K
R448 430
R450
1.2K
C440
C442
C441
0.047
C443
22/50
C444
R437
R438
100K
H 4/4 CN9661
L
G (AG)
R
G (AG)
FL
G (AG)
FR
G (AG)
SL
G (AG)
SR
G (AG)
C
G (AG)
SW
(DIRECT)
CN408
53290-1510
SW
C
A -15V
SR
A +15V
SL
L IN
AG
R IN
MG
D +5V
LOUDNESS
9K/10K
VOL UP
VOL DOWN
I 701
CN410
KPE15
IC407 (2/2)
NJM4558D-D
IC407 (1/2)
IC405 TC9299P
LEVEL
C451
C452
C458
C459
C460
C465
C466
C467
C468
C469
C470
R454
R455
R456
R461
R462
D405
D406
+5V
IC408 (2/2)
NJM4558D-D
IC408 (1/2)
IC406 TC9299P
C453
C454
C461
C462
C463
C471
C472
C473
C474
C475
C476
R457
R458
R459
R463
R464
D407
D408
C3/3
A MUTE
AM
AF
FC
RF
OL
ECTOR
A. MUTE
VOL DOWN
VOL UP
9K/10K
A 902

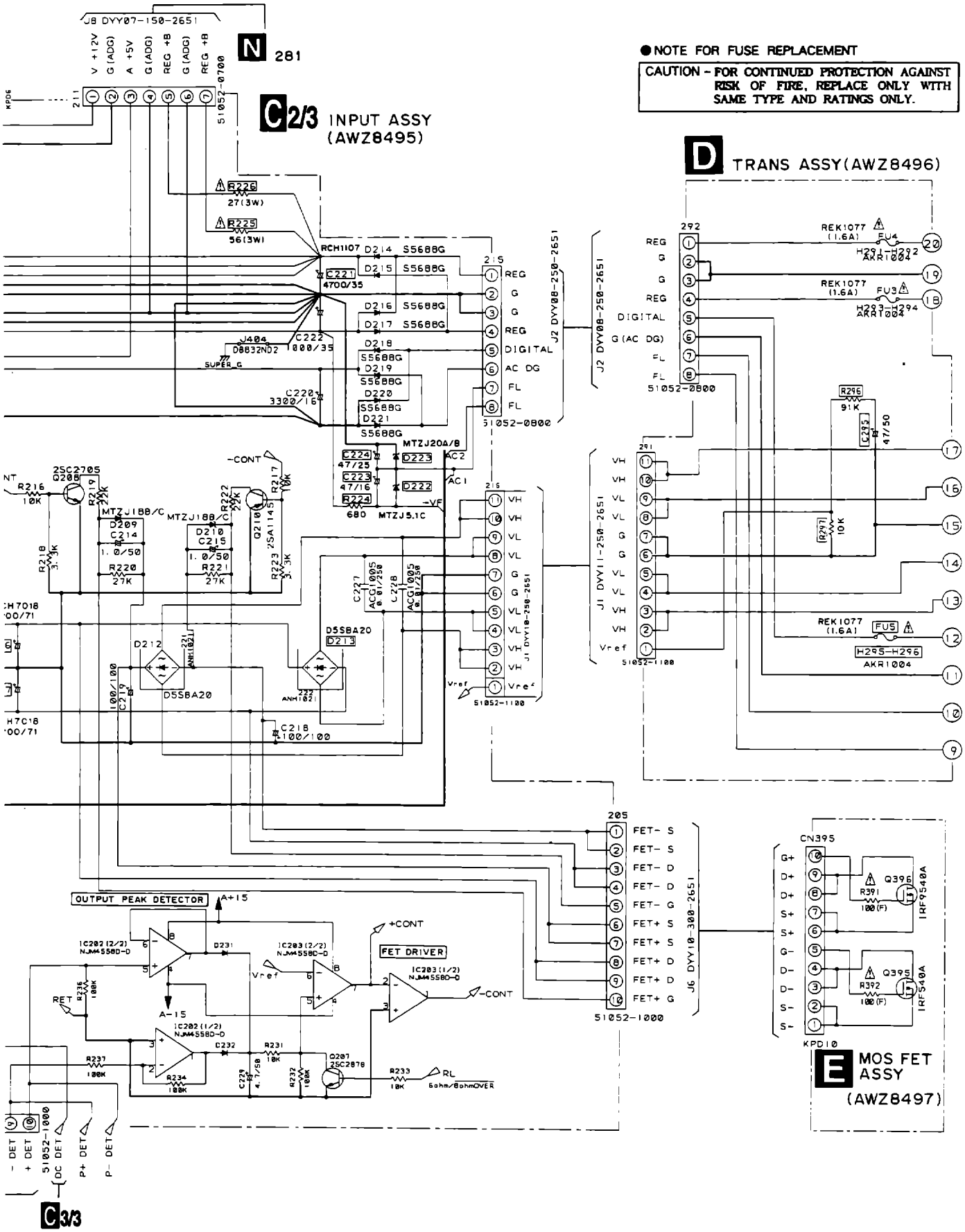
3.4 INPUT ASSY (2/3), TRANS ASSY AND MOS FET ASSY



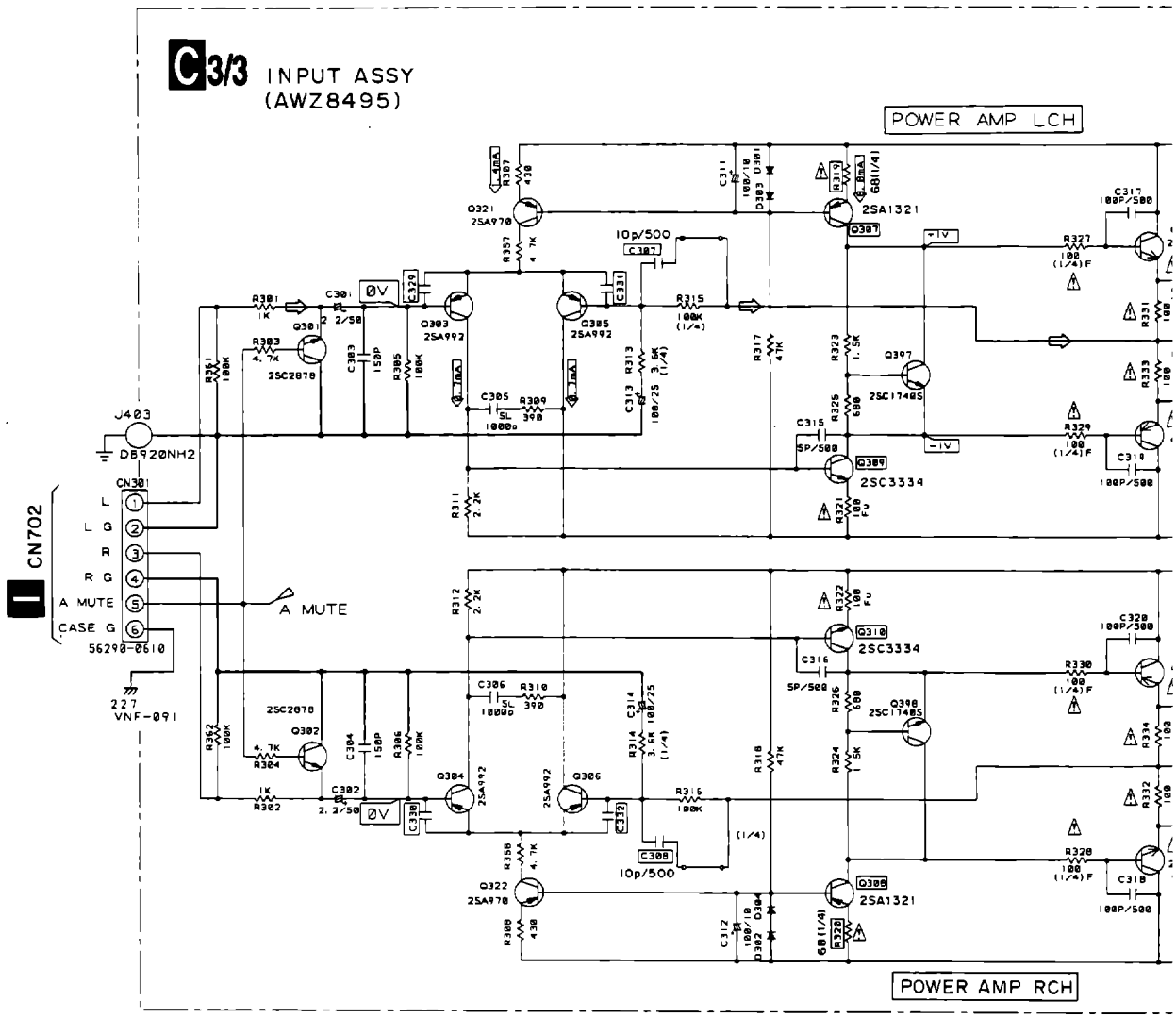
INPUT ASSY
S201 : IMPEDANCE SELECTOR

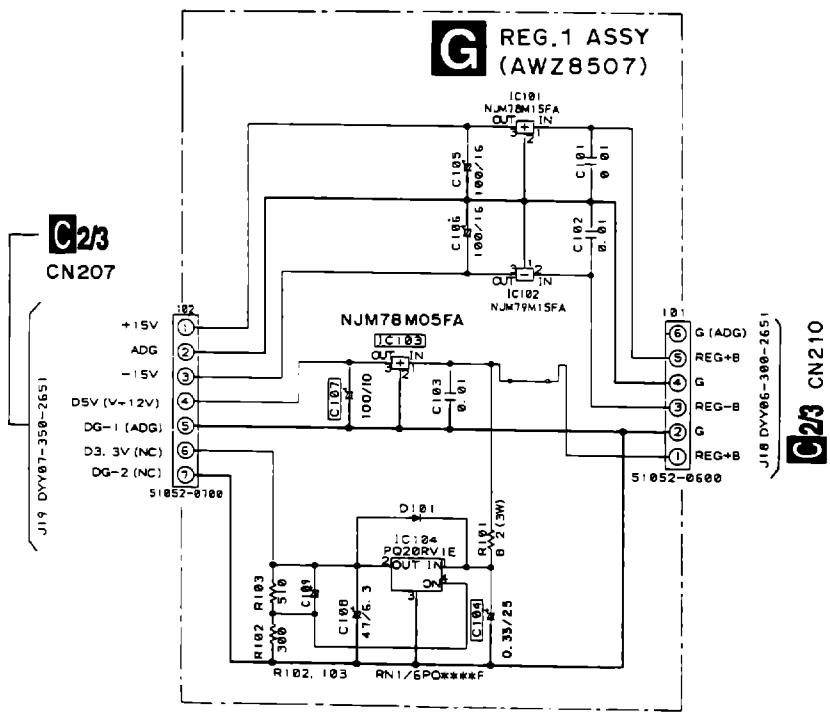
C 2/3

⇨: AUDIO SIGNAL ROUTE
(H.P)⇨: AUDIO SIGNAL ROUTE (HEADPHONE)

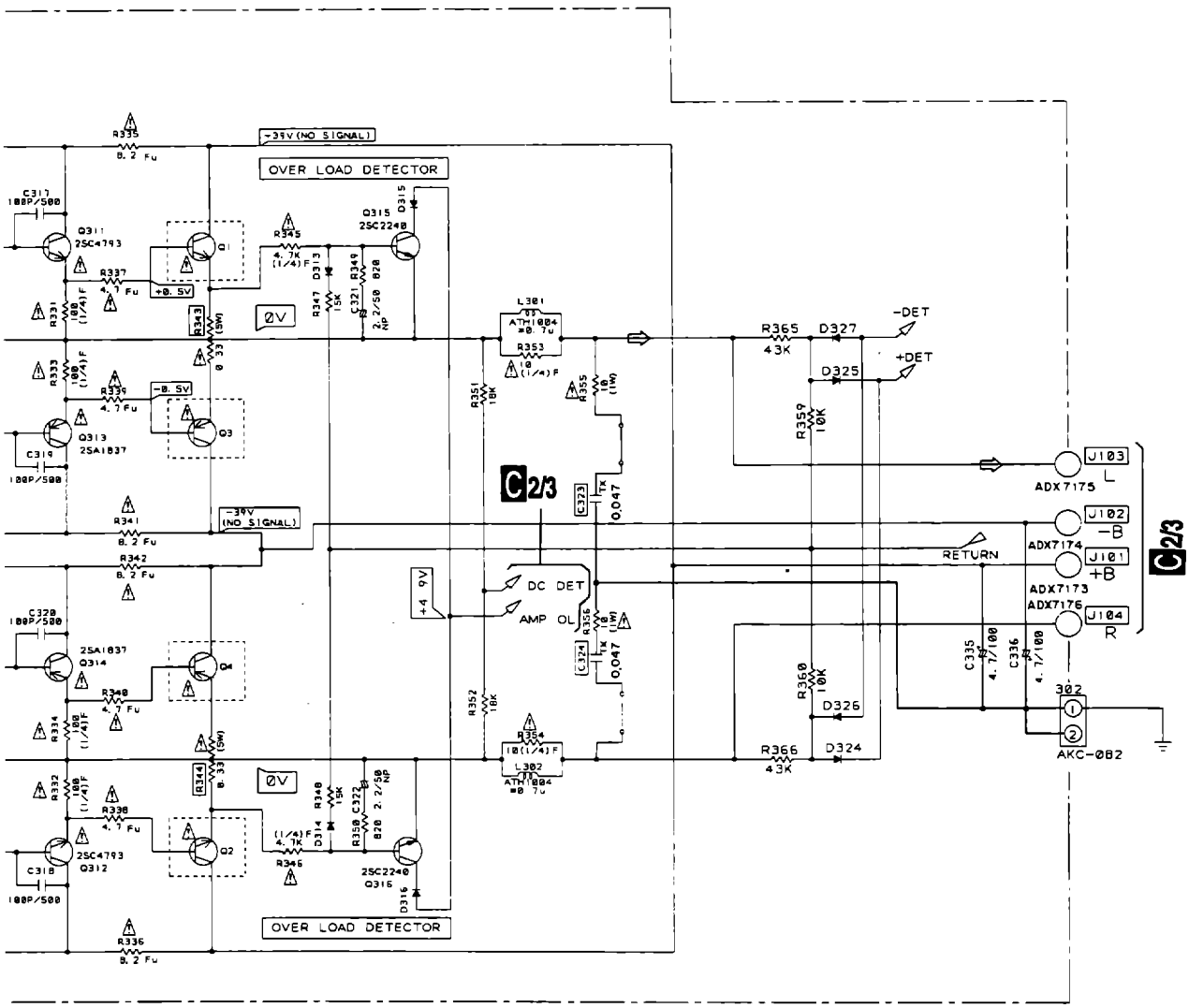

N 281
C2/3 INPUT ASSY (AWZ8495)
D TRANS ASSY(AWZ8496)
● NOTE FOR FUSE REPLACEMENT
CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.
OUTPUT PEAK DETECTOR
FET DRIVER
E MOS FET ASSY (AWZ8497)
C3/3

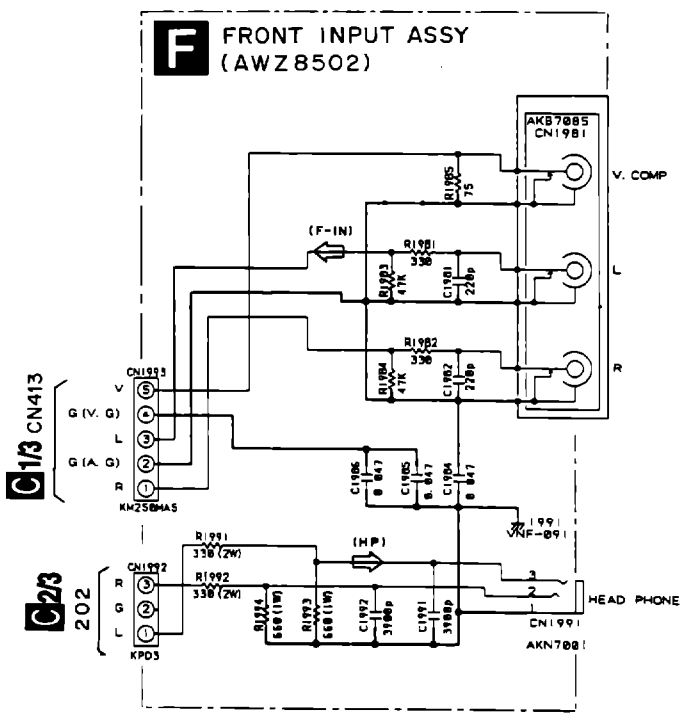
3.5 INPUT ASSY (3/3), FRONT INPUT ASSY AND REG.1 ASSY





⇨: AUDIO SIGNAL ROUTE
(H.P)⇨: AUDIO SIGNAL ROUTE (HEADPHONE)
(F.IN)⇨: AUDIO SIGNAL ROUTE (F.IN)





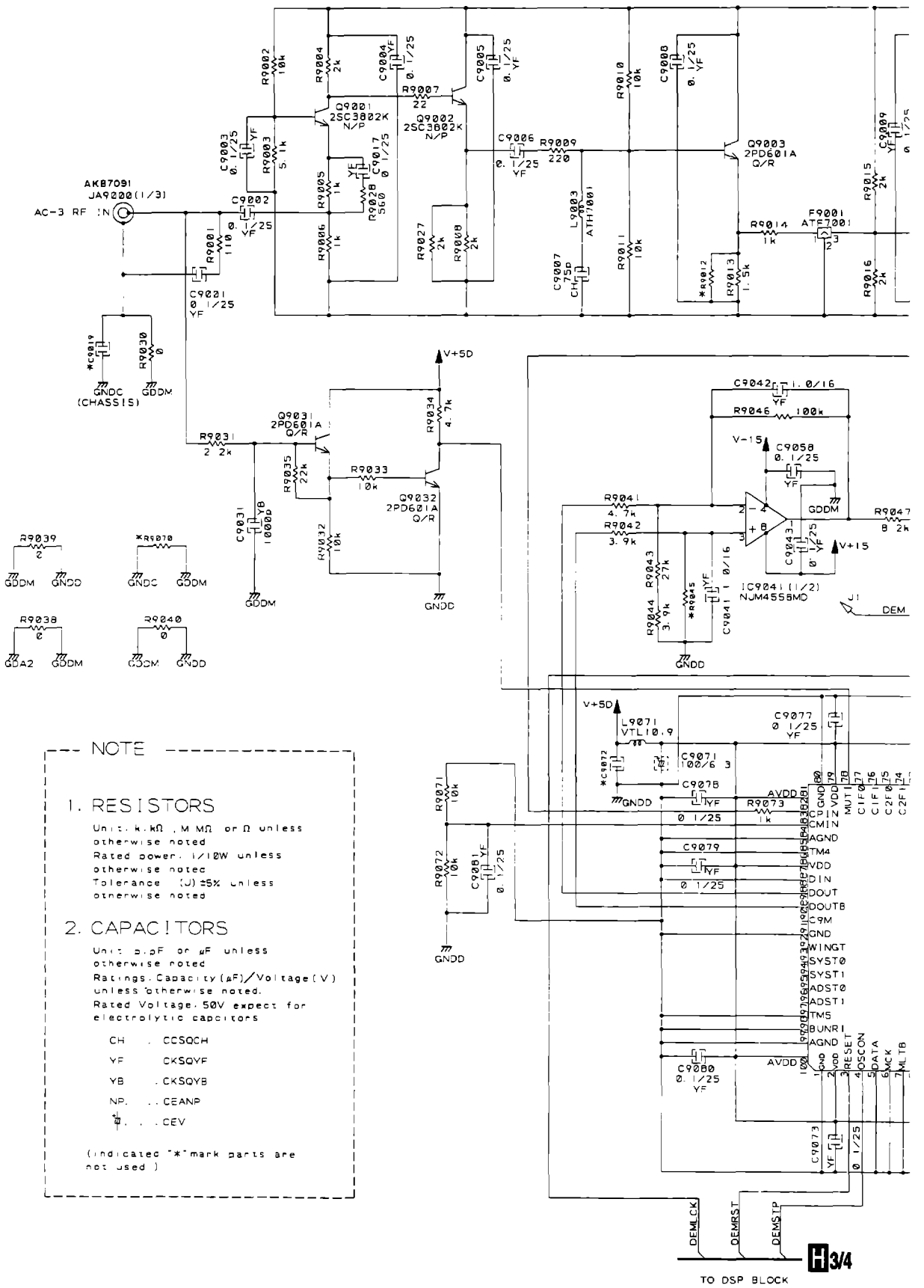
Noted

1. Resistors
   Indicated in ohm 1/4W
   tolerance ±5%
   unless otherwise noted
   K Kohm , M:Mohm
   F Non flammable type
   Fu Non flammable quick open type
   FL Non flammable type(RD1/4LMF***J type)

2. Capacitors
   Indicated in capacity(uF)/voltage(V)
   unless otherwise noted
   p=pF
   Indication without voltae is 50V except
   electrolytic capacitor
   NL=CEANL⁻, TX=CFTXA⁻

3. Diodes
   Other diodes(not noted) are 1SS252

3.6 DOLBY DIGITAL ASSY



NOTE

1. RESISTORS

Unit: kΩ, MΩ or Ω unless otherwise noted
Rated power: 1/10W unless otherwise noted
Tolerance: (J) ±5% unless otherwise noted

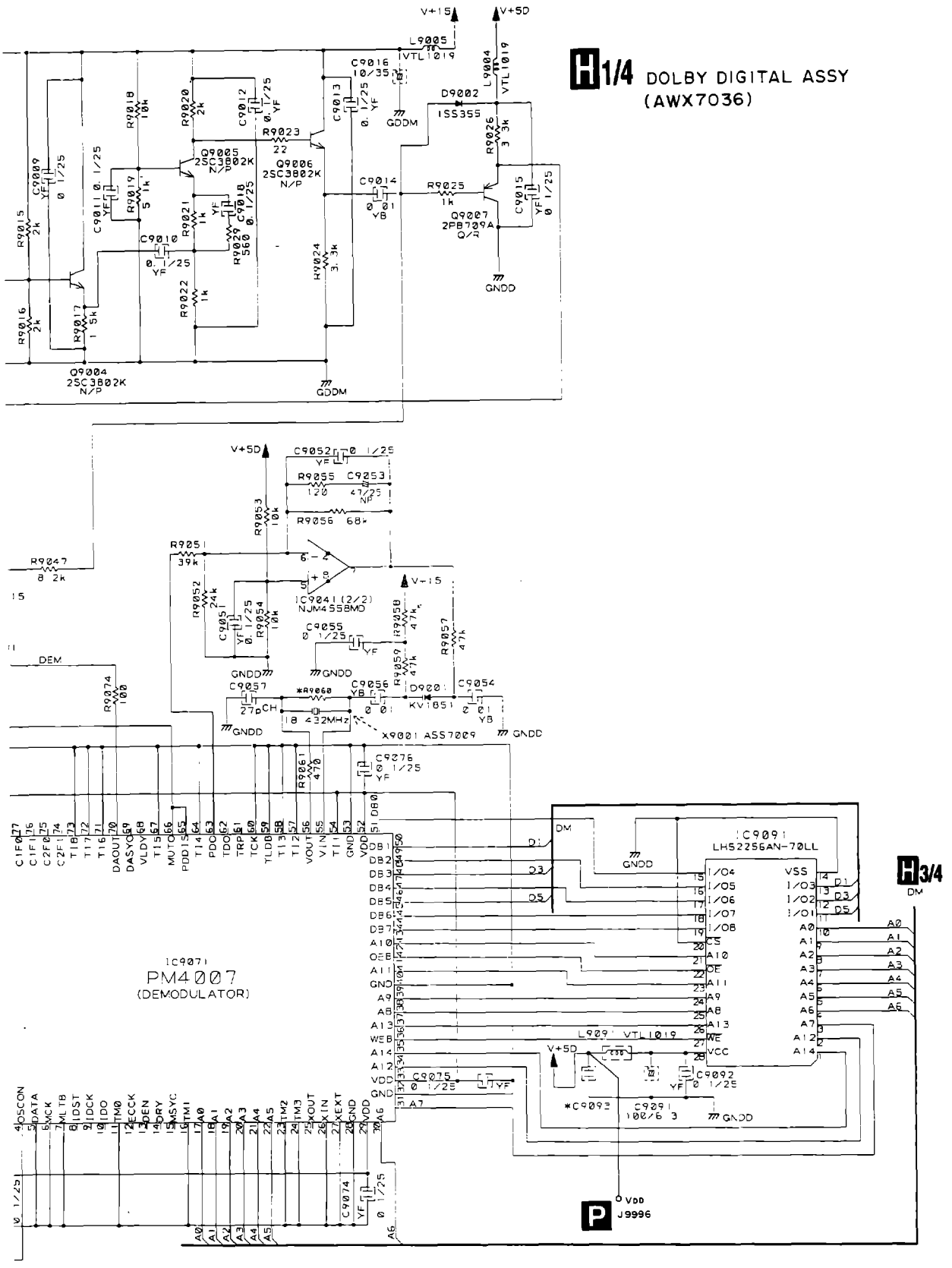
2. CAPACITORS

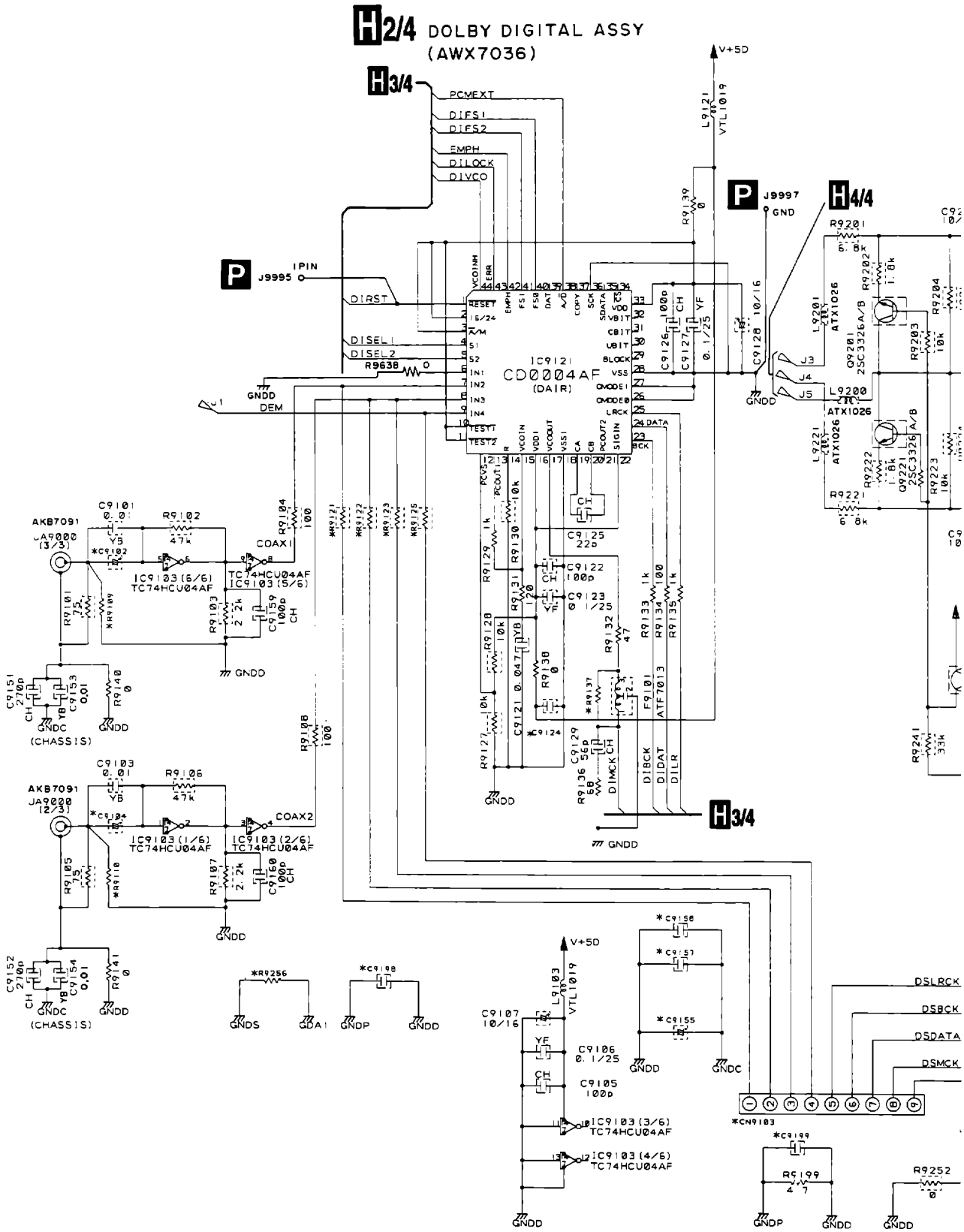
Unit: pF or μF unless otherwise noted
Ratings: Capacity (μF)/Voltage (V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors

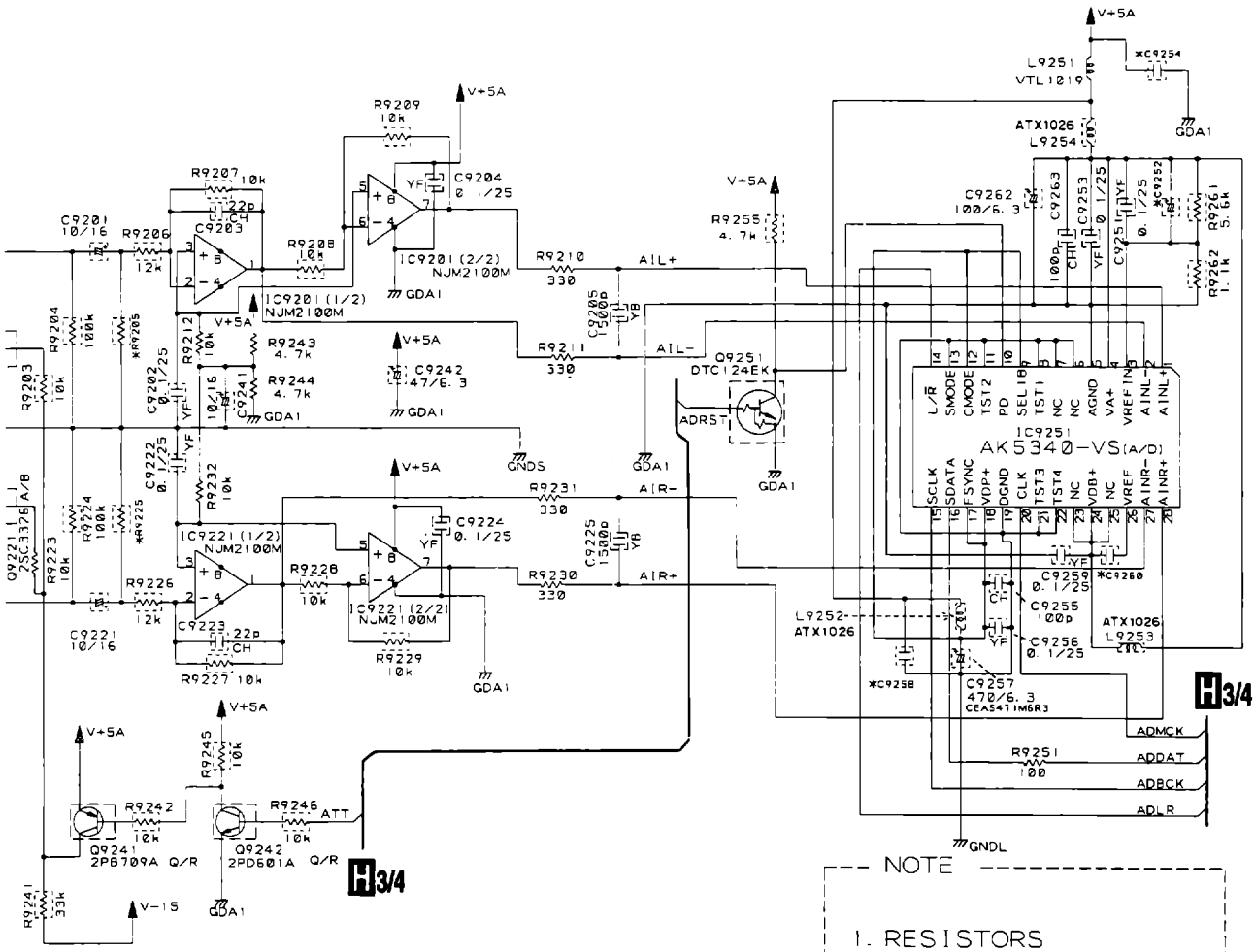
CH . . . CCSQCH
YF . . . CKSQYF
YB . . . CKSQYB
NP . . . CEANP
. . . CEV

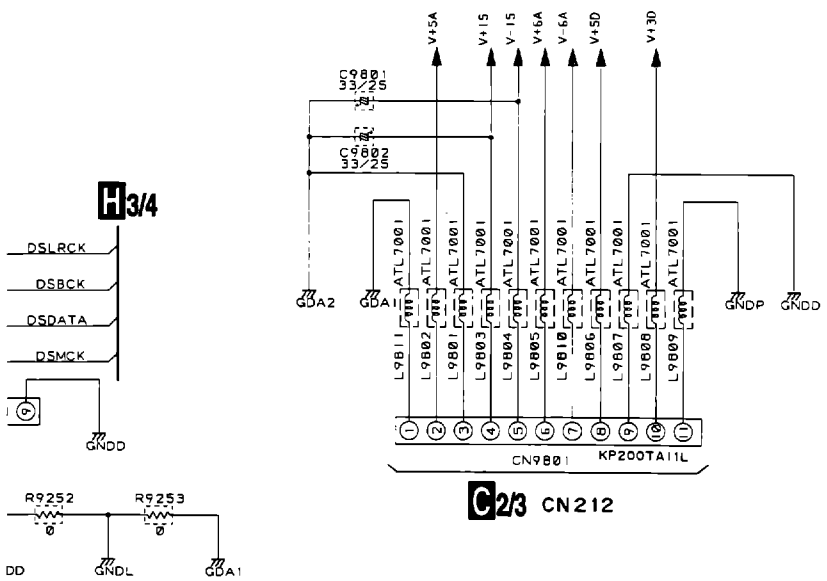
(Indicated "*" mark parts are not used.)

H1/4 DOLBY DIGITAL ASSY (AWX7036)




H2/4 DOLBY DIGITAL ASSY
(AWX7036)
H3/4
PCMEXT
DIFS1
DIFS2
EMPH
DILOCK
DIVCO
P J9995 IPIN
DIRST
DISEL1
DISEL2
R9638 0
GNDD
DEM
IC9121
CD0004AF
(DAIR)
V+5D
L9121 VTL1019
P J9997 GND
H4/4
R9201
L9201 ATX1026
Q9201 2SC3326A/B
R9202
R9203
R9204
L9200 ATX1026
L9221 ATX1026
Q9221 2SC3326A/B
R9222
R9223
J3
J4
J5
C9128 10/16
C9126 100p CH
C9127 0.1/25 YF
C9125 220
C9122 100p CH
C9123 0.1/25 YF
C9124
C9129 56p CH
R9136 68
R9137 1.2k
R9138 0
R9139 0
R9127 10k
R9128 10k YB
R9129 1k
R9130 10k
R9131 120
R9132 47
R9133 1k
R9134 100
R9135 1k
R9241 33k
F9101 ATF7013
DIBCK
DIDAT
DILR
DIMCK
AKB7091
JA9000 (3/3)
C9101 0.01 YB
R9102 47k
*C9102
COAX1
IC9103(5/6) TC74HCU04AF
IC9103(5/6) TC74HCU04AF
R9101 75
*R9109
R9103 2.2k
C9159 1000p CH
R9104 100
C9151 2700p CH
C9153 0.01 YB
R9140 0
GNDC
(CHASSIS)
GNDD
AKB7091
JA9000 (2/3)
C9103 0.01 YB
R9106 47k
*C9104
COAX2
IC9103(1/6) TC74HCU04AF
IC9103(2/6) TC74HCU04AF
R9105 75
*R9110
R9107 2.2k
C9160 1000p CH
R9108 100
C9152 2700p CH
C9154 0.01 YB
R9141 0
*R9256
GNDS
GDA1
*C9198
GNDP
C9107 10/16
L9103 VTL1019
C9106 0.1/25 YF
C9105 100p CH
IC9103(3/6) TC74HCU04AF
IC9103(4/6) TC74HCU04AF
*C9156
*C9157
*C9155
*CN9103
DSLRCK
DSBCK
DSDATA
DSMCK
*C9199
R5199 4.7
R9252 0





NOTE

1. RESISTORS

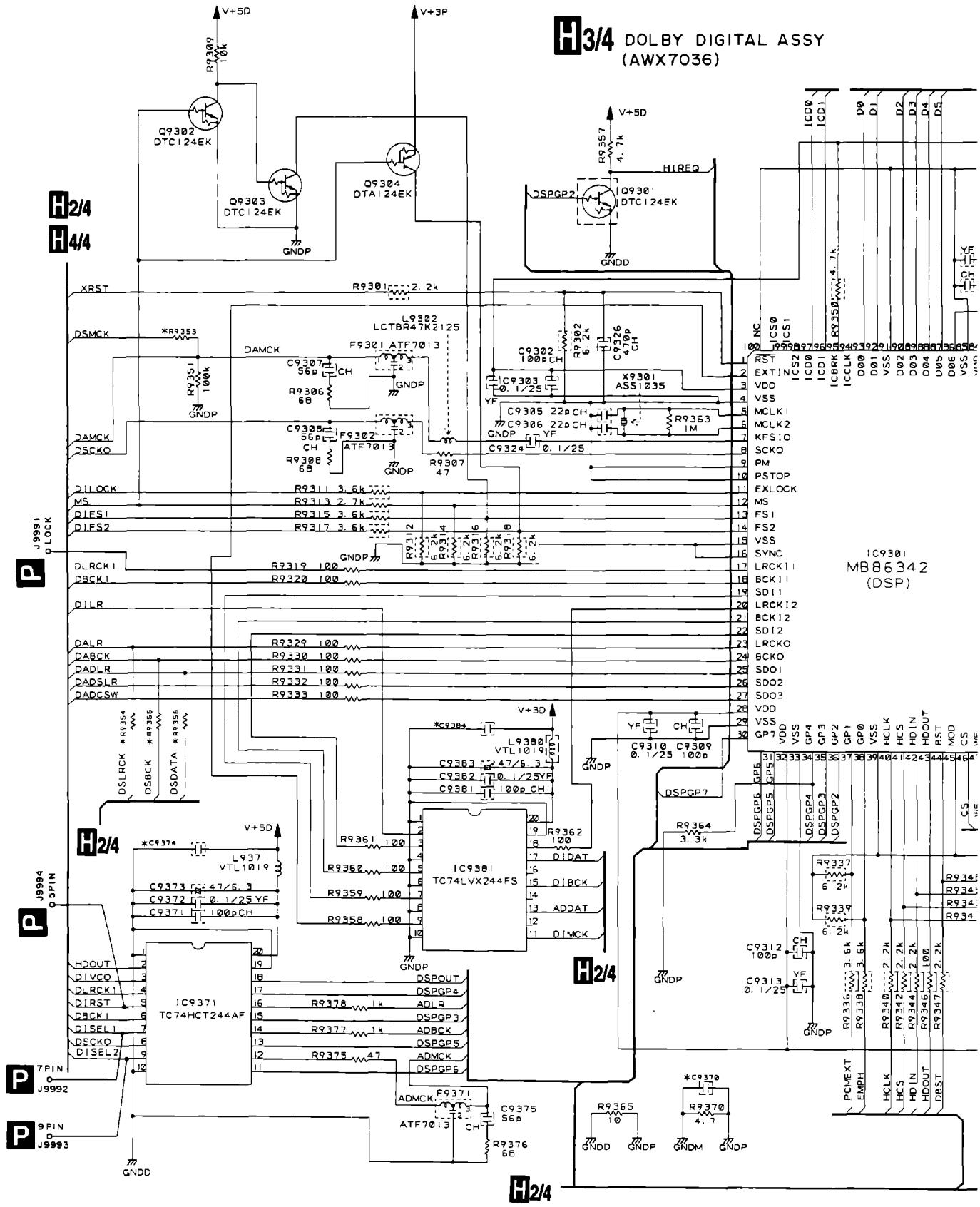
Unit: k:kΩ, M:MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted

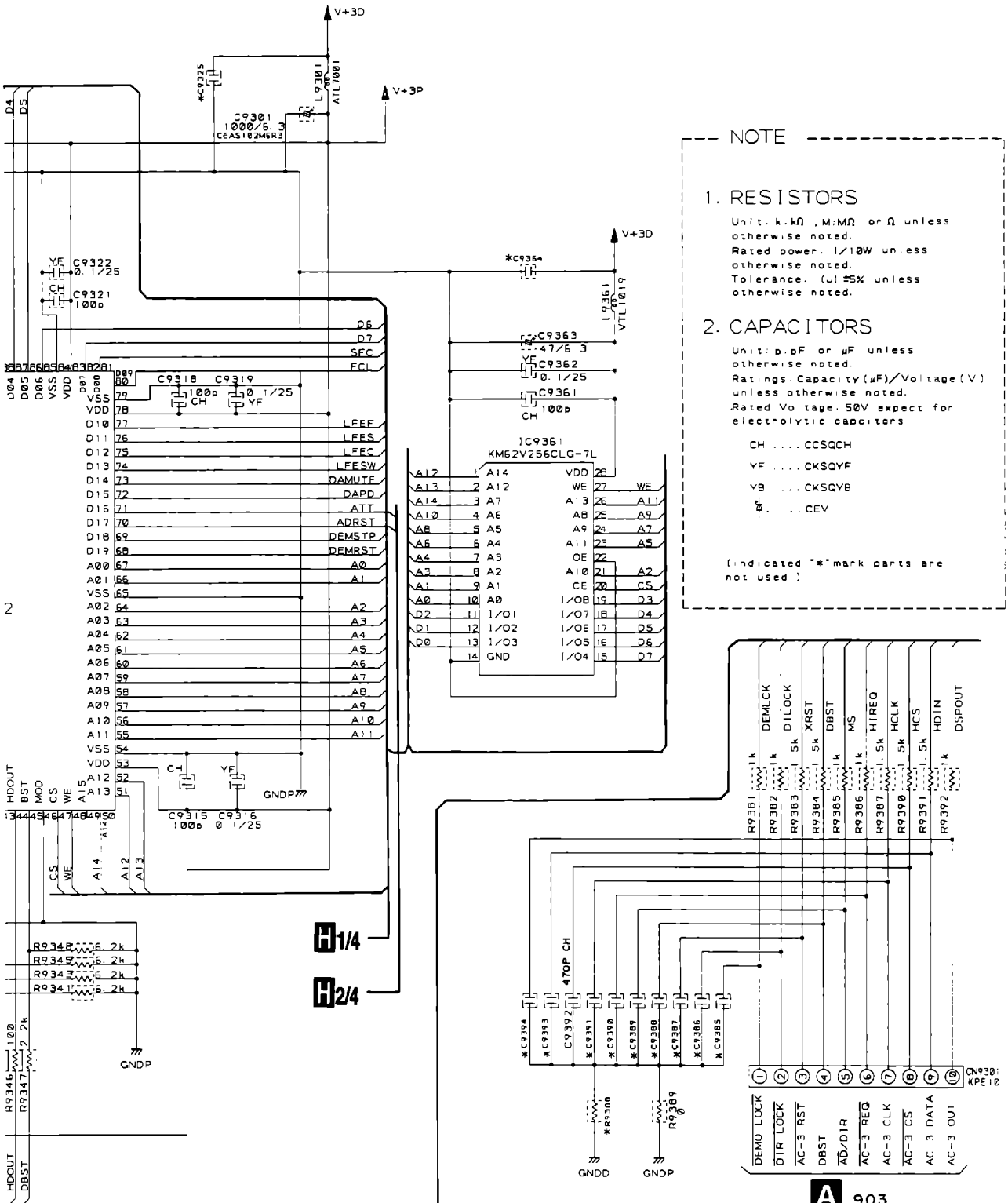
2. CAPACITORS

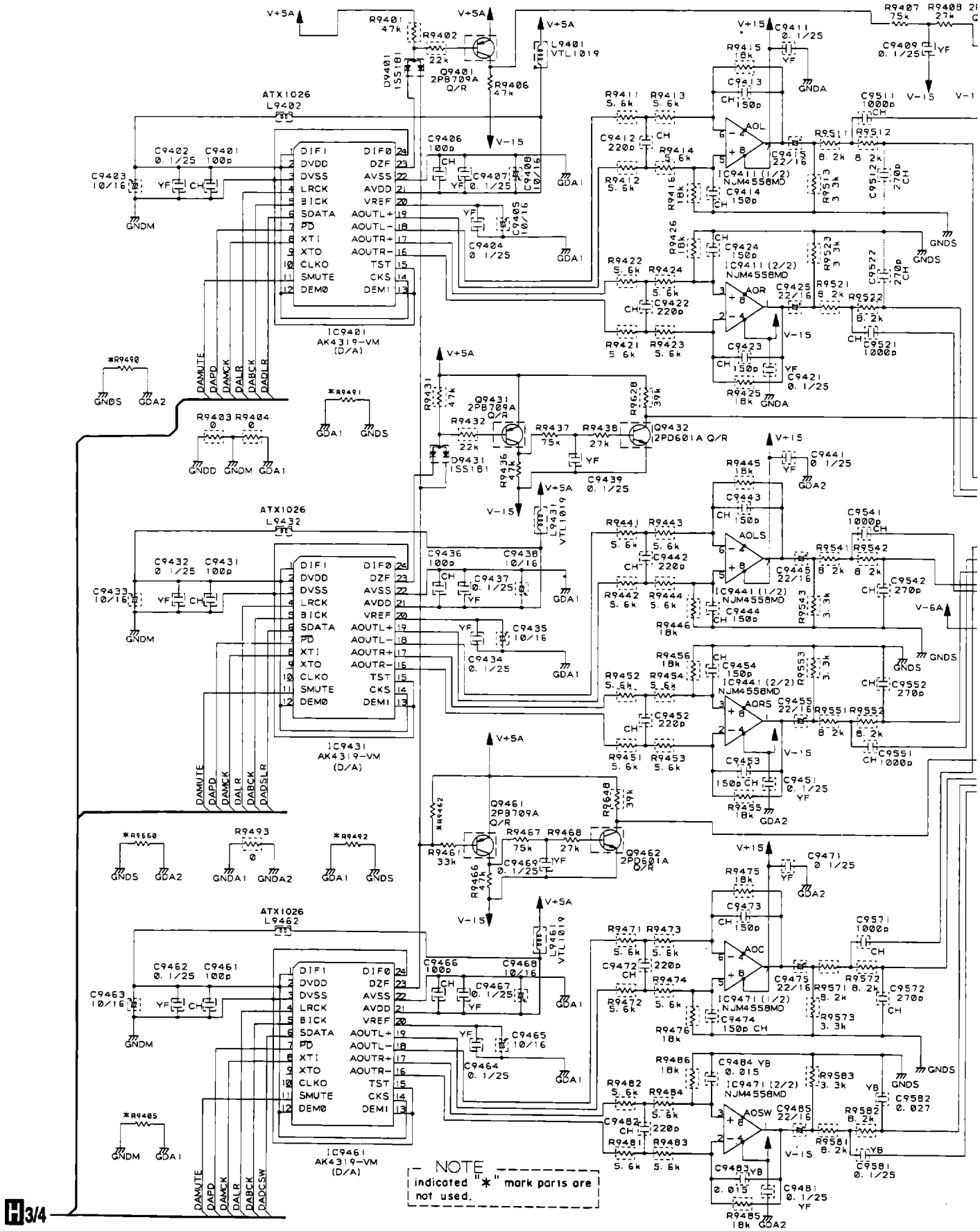
Unit: p:pF or μF unless otherwise noted.
Ratings: Capacity (μF)/Voltage (V) unless otherwise noted.
Rated Voltage 50V expect for electrolytic capacitors

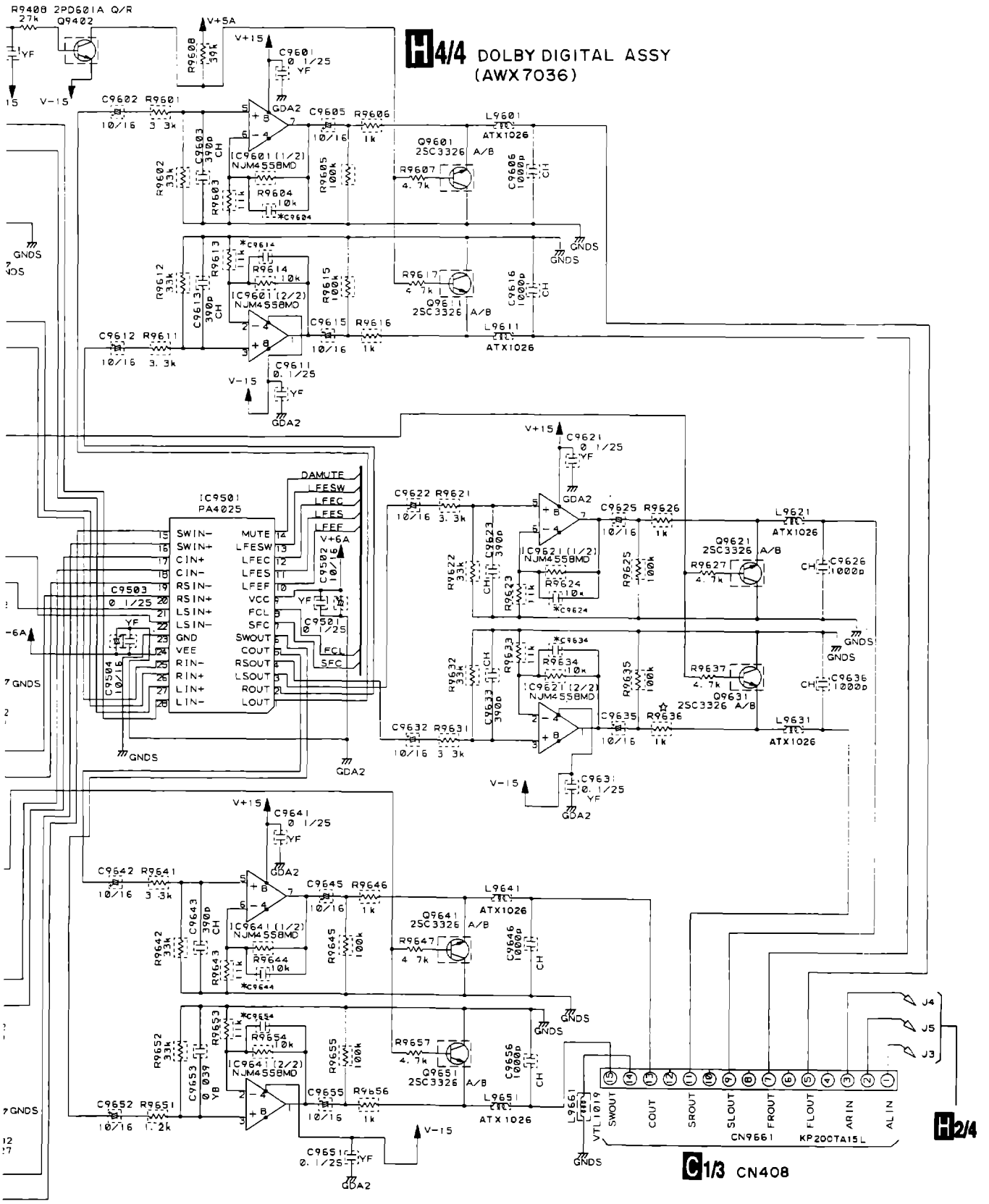
CH. . . . CCSQCH
YF . . . CKSQYF
YB. . . . . CKSQYB
. . . . . CEV

(Indicated "*" mark parts are not used.)

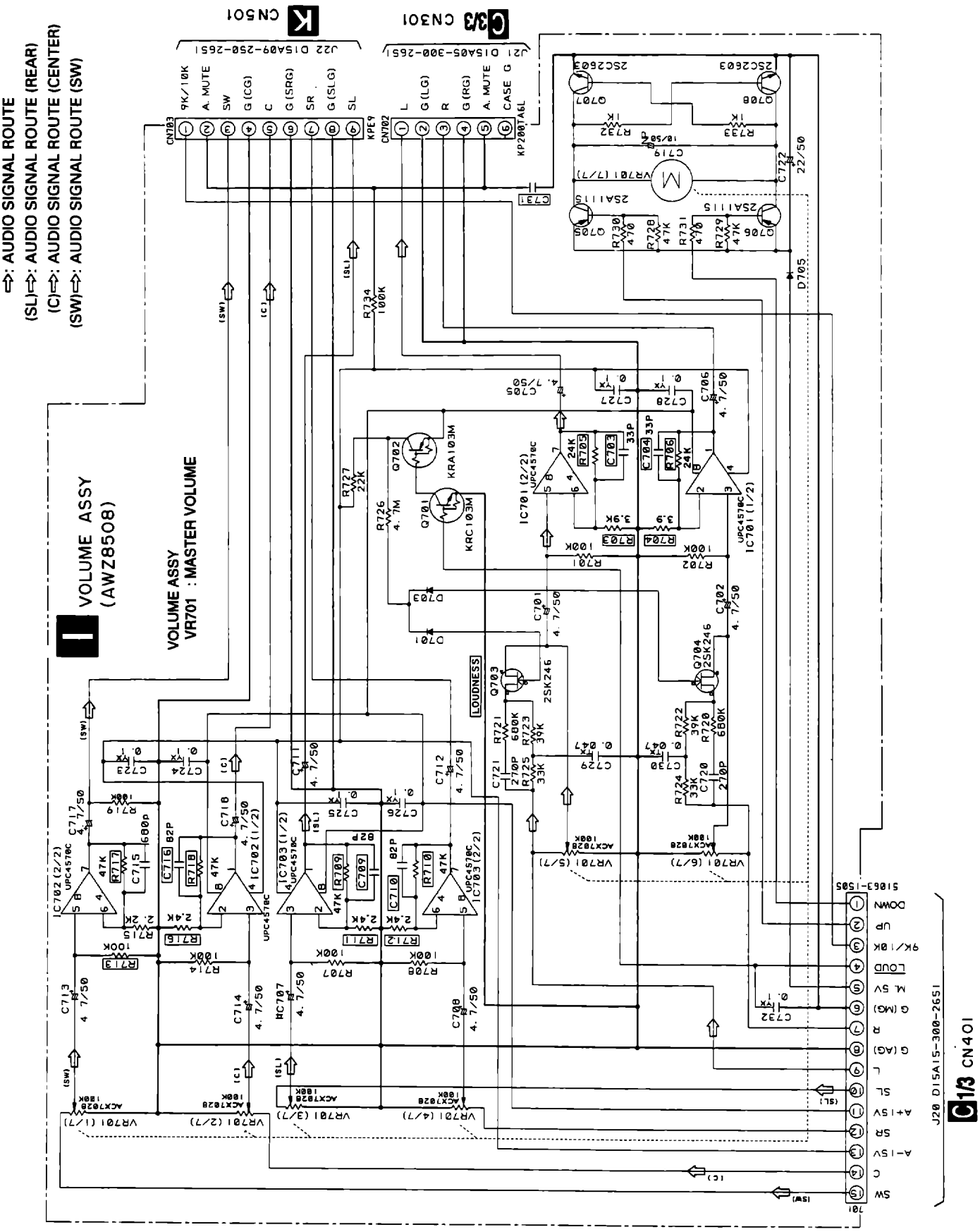

H3/4 DOLBY DIGITAL ASSY
(AWX7036)
IC9301
MB86342
(DSP)
IC9381
TC74LVX244FS
IC9371
TC74HCT244AF
H2/4
H4/4
P
J9991
J9994
J9992
J9993
V+5D
V+3P
V+3D
GNDP
GNDD
XRST
DSMCK
DAMCK
DSCKO
DILOCK
MS
DIFS1
DIFS2
DILRCK1
DIBCK1
DIDLR
DADLR
DADBCK
DADSLR
DADCSW
DSLRCK
DSBCK
DSDATA
HIREQ
DSPGP2
DSPGP7
DIDAT
DIBCK
DIMCK
ADDAT
DSPOUT
DSPGP4
ADLR
DSPGP3
ADBCK
DSPGP5
ADMCK
DSPGP6
HDOUT
DIVCO
DLRCK1
DIRST
DIBCK1
DISEL1
DSCKO
DISEL2
PCMEXT
EMPH
HCLK
HCS
HDIN
HDOUT
DBST


NOTE
1. RESISTORS
Unit: k.kΩ , M:MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.
2. CAPACITORS
Unit: p.pF or μF unless otherwise noted.
Ratings: Capacity(μF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capcitors
CH ....CCSQCH
YF ....CKSQYF
YB ....CKSQYB
....CEV
(indicated "*"mark parts are not used)
V+3D
V+3P
IC9361
KM62V256CLG-7L
H1/4
H2/4
GNDP
GNDD
CN9301
KPE10
DEMO LOCK
DIR LOCK
AC-3 RST
DBST
AD/DIR
AC-3 REQ
AC-3 CLK
AC-3 CS
AC-3 DATA
AC-3 OUT
A 903

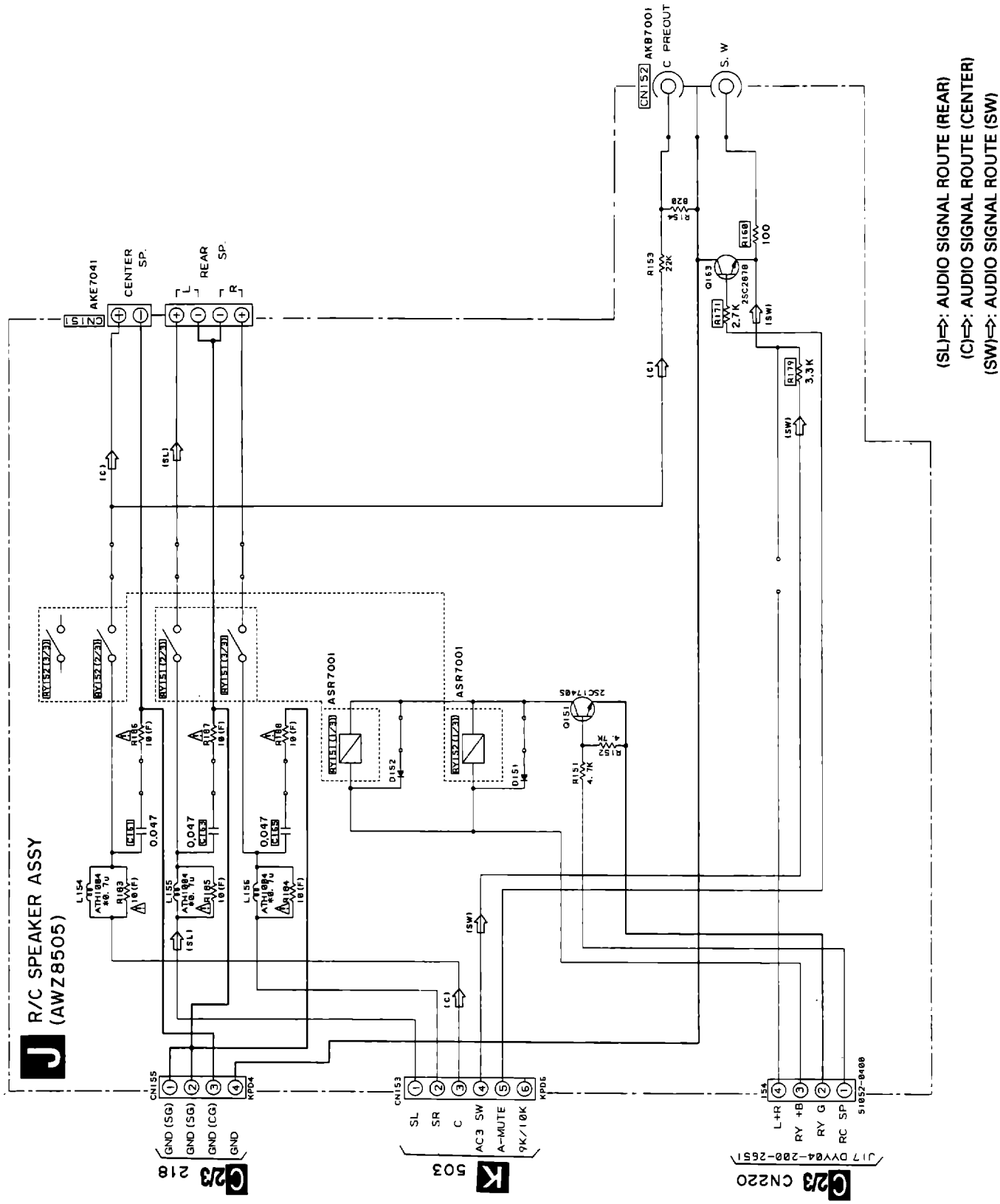

IC9401
AK4319-VM
(D/A)
IC9431
AK4319-VM
(D/A)
IC9461
AK4319-VM
(D/A)
ATX1026
L9402
ATX1026
L9432
ATX1026
L9462
Q9401
2PB709A
Q/R
Q9431
2PB709A
Q/R
Q9461
2PB709A
Q/R
Q9432
2PD601A Q/R
Q9462
2PD601A
Q/R
D9401
1SS181
D9431
1SS181
L9401
VTL1019
L9431
VTL1019
L9461
VTL1019
IC9411 (1/2)
NJM4558MD
IC9441 (1/2)
NJM4558MD
IC9471 (1/2)
NJM4558MD
IC9411 (2/2)
NJM4558MD
IC9441 (2/2)
NJM4558MD
IC9471 (2/2)
NJM4558MD
V+5A
V-15
V+15
V-6A
GNDA
GNDS
GNDM
GNDD
GDA1
GDA2
GNDA1
GNDA2
DAMUTE
DAPD
DAMCK
DALR
DABCK
DADLR
DADSW
NOTE
indicated "*" mark parts are not used.
H3/4


H4/4 DOLBY DIGITAL ASSY
(AWX7036)
IC9501
PA4025
SWIN-
SWIN+
CIN+
CIN-
RSIN-
RSIN+
LSIN+
LSIN-
GND
VEE
RIN-
RIN+
LIN+
LIN-
MUTE
LFESW
LFEC
LFES
LFEF
VCC
FCL
SFC
SWOUT
COUT
RSOUT
LSOUT
ROUT
LOUT
DAMUTE
IC9601 (1/2)
NJM4558MD
IC9601 (2/2)
NJM4558MD
IC9621 (1/2)
NJM4558MD
IC9621 (2/2)
NJM4558MD
IC9641 (1/2)
NJM4558MD
IC9641 (2/2)
NJM4558MD
Q9601
2SC3326 A/B
Q9611
2SC3326 A/B
Q9621
2SC3326 A/B
Q9631
2SC3326 A/B
Q9641
2SC3326 A/B
Q9651
2SC3326 A/B
L9601
ATX1026
L9611
ATX1026
L9621
ATX1026
L9631
ATX1026
L9641
ATX1026
L9651
ATX1026
L9661
VTL1019
V+15
V-15
V+6A
V+5A
GDA2
GNDS
CN9661
KP200TA15L
CN408
H2/4
C1/3

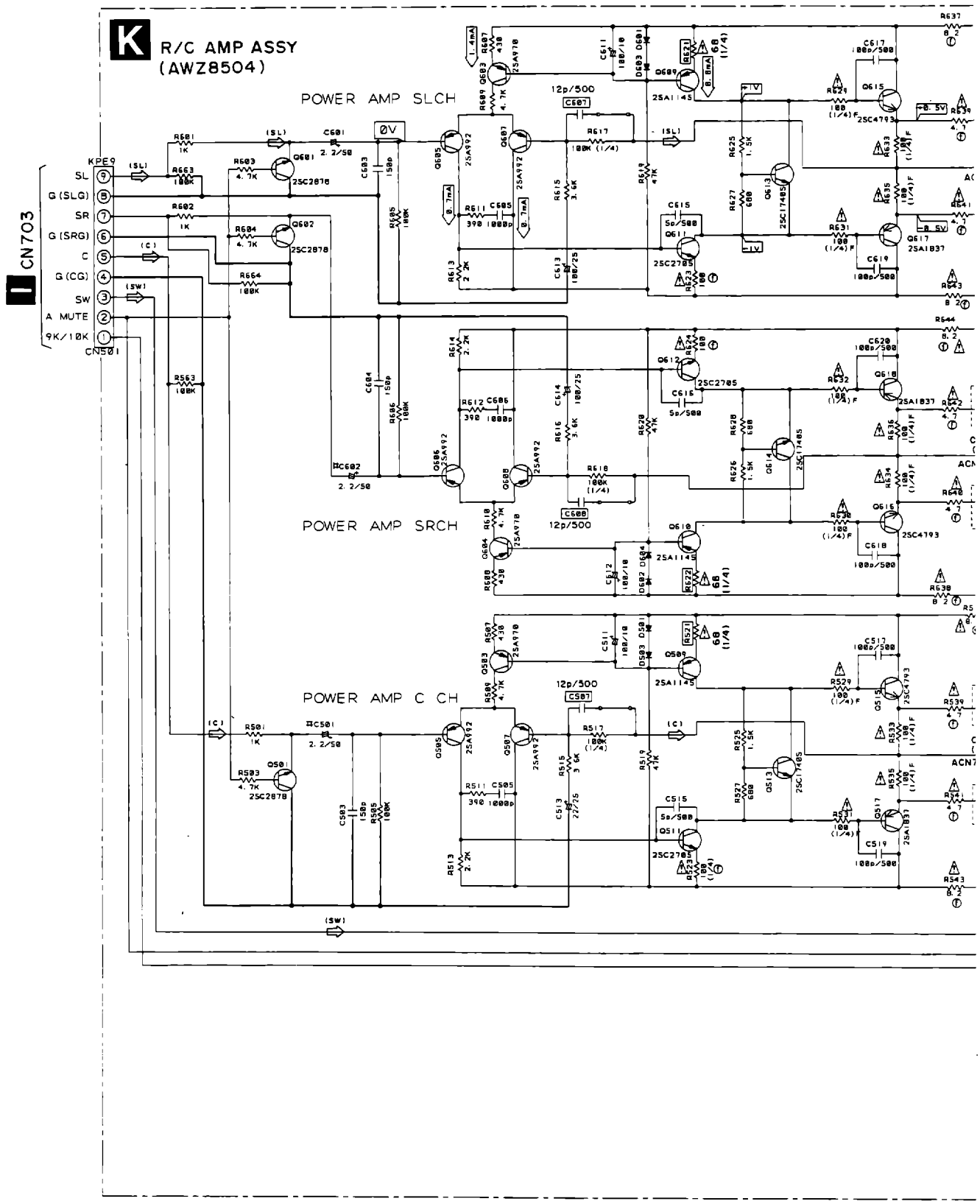
3.7 VOLUME ASSY

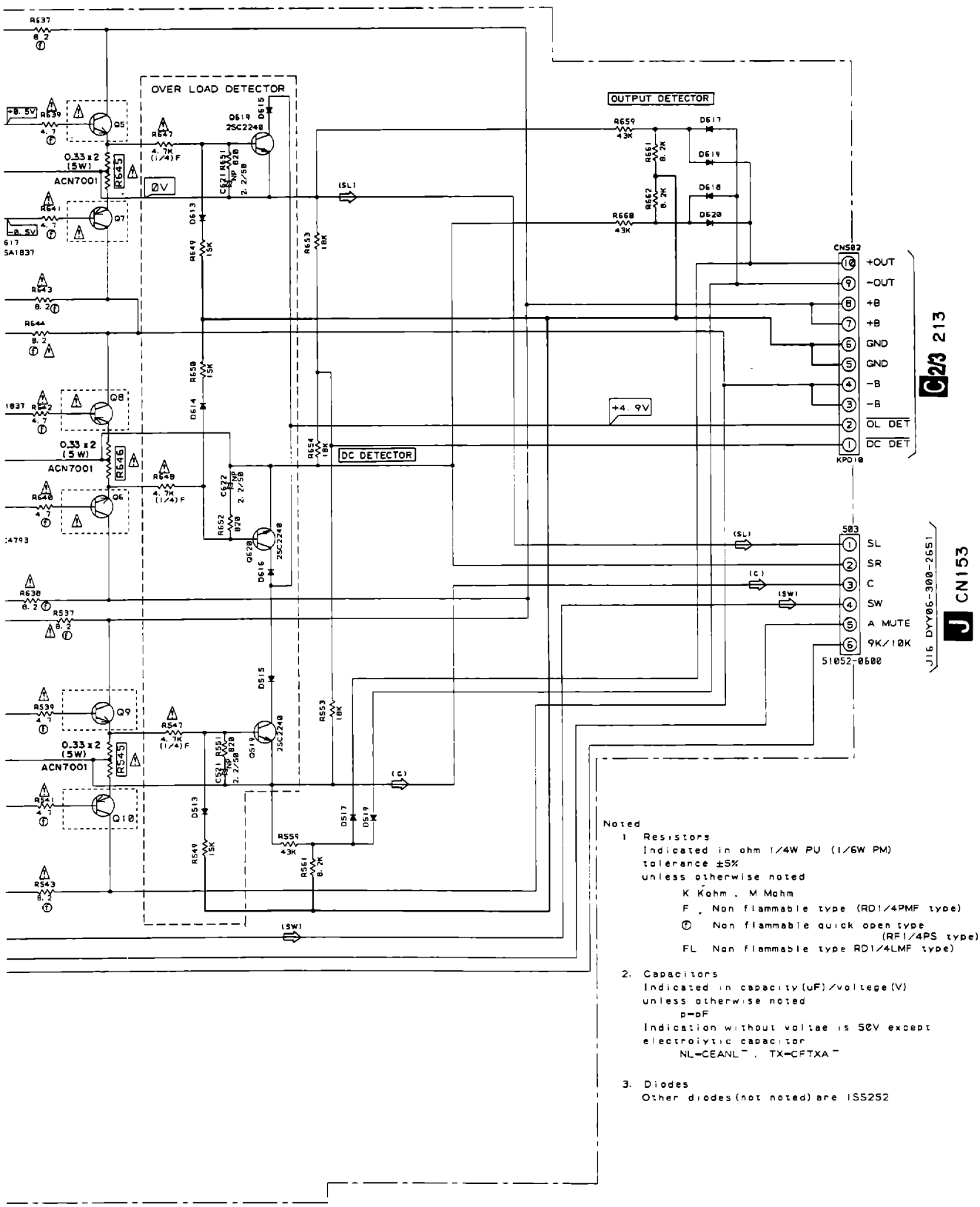


3.8 R/C SPEAKER ASSY



3.9 R/C AMP ASSY





Noted

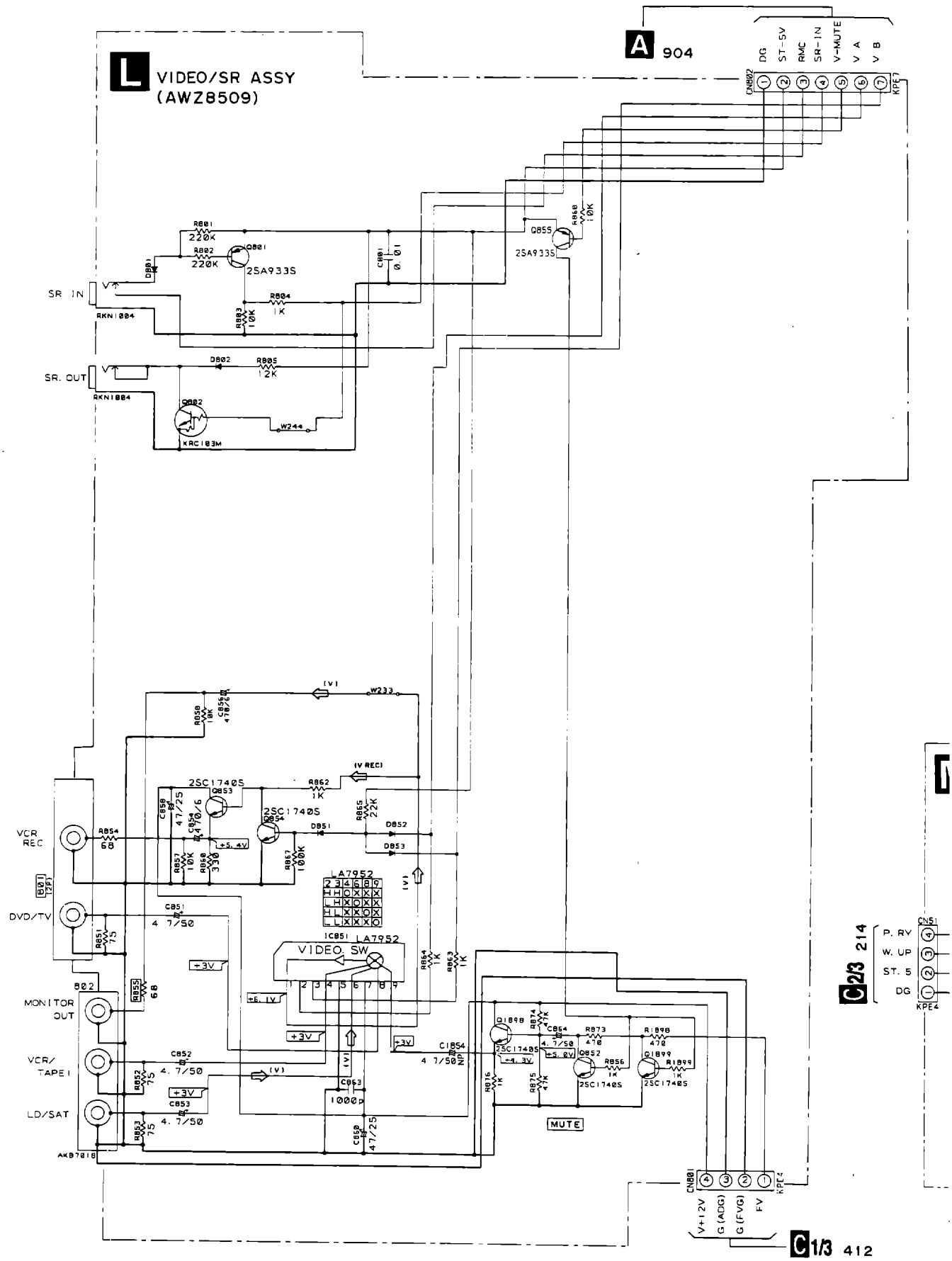
1. Resistors
   Indicated in ohm 1/4W PU (1/6W PM)
   tolerance ±5%
   unless otherwise noted
   K Kohm , M Mohm
   F , Non flammable type (RD1/4PMF type)
   Ⓕ Non flammable quick open type (RF1/4PS type)
   FL Non flammable type RD1/4LMF type)

2. Capacitors
   Indicated in capacity(uF)/voltage(V)
   unless otherwise noted
   p=pF
   Indication without voltae is 50V except electrolytic capacitor
   NL=CEANL⁻ , TX=CFTXA⁻

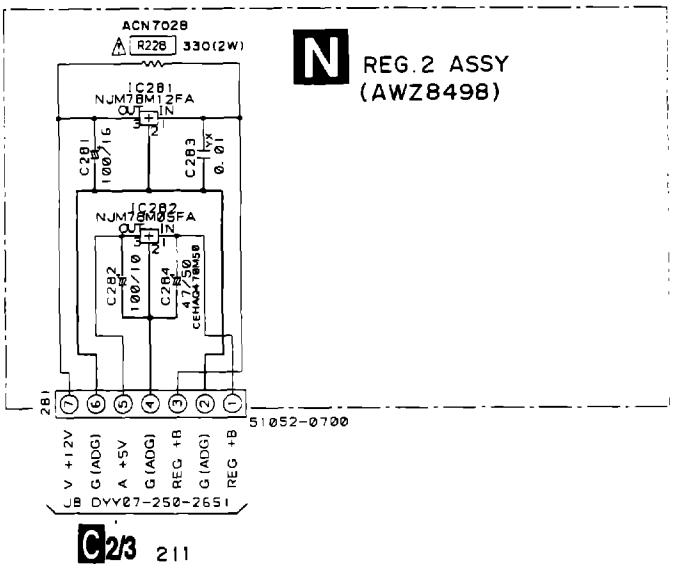
3. Diodes
   Other diodes(not noted) are 1SS252

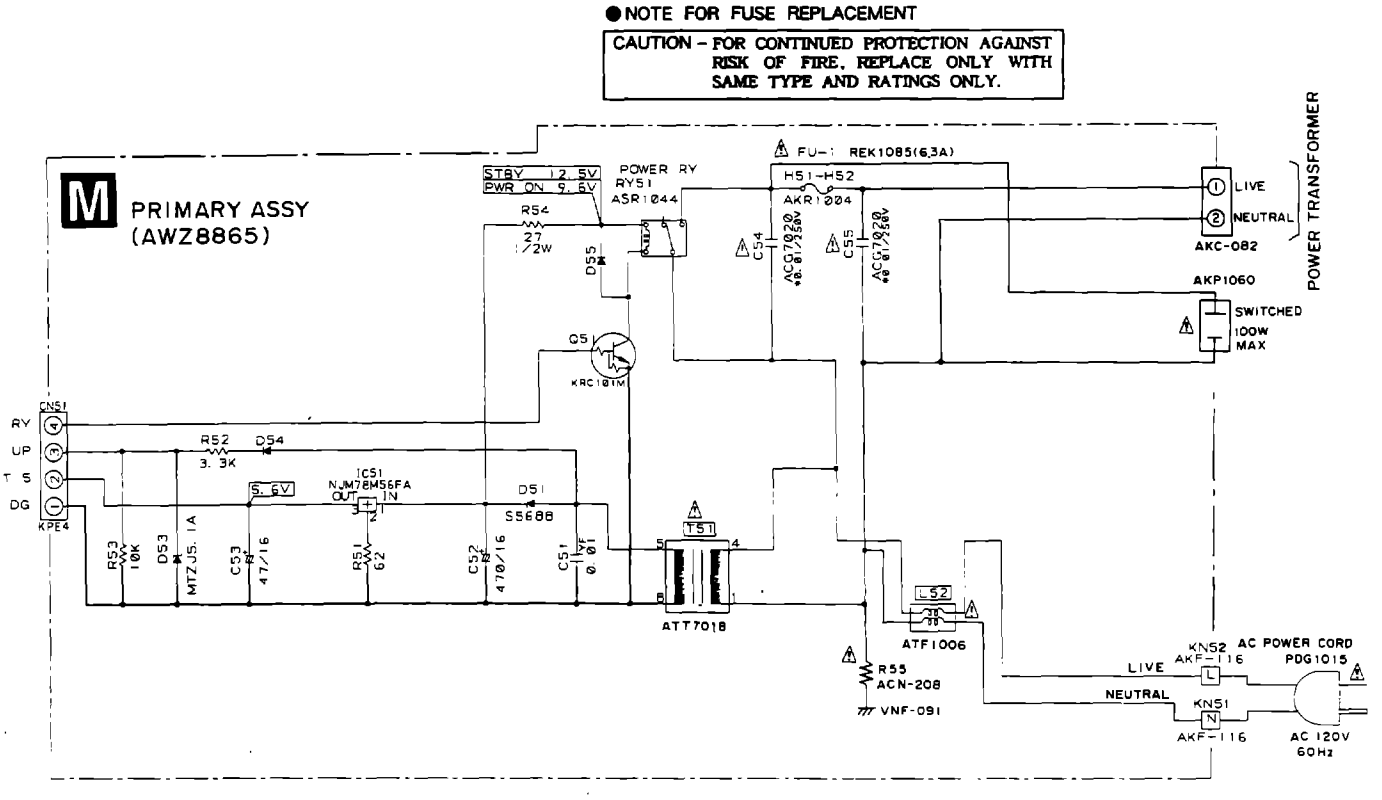
(SL)⇨: AUDIO SIGNAL ROUTE (REAR)
(C)⇨: AUDIO SIGNAL ROUTE (CENTER)
(SW)⇨: AUDIO SIGNAL ROUTE (SW)

3.10 VIDEO/SR ASSY, PRIMARY ASSY AND REG.2 ASSY



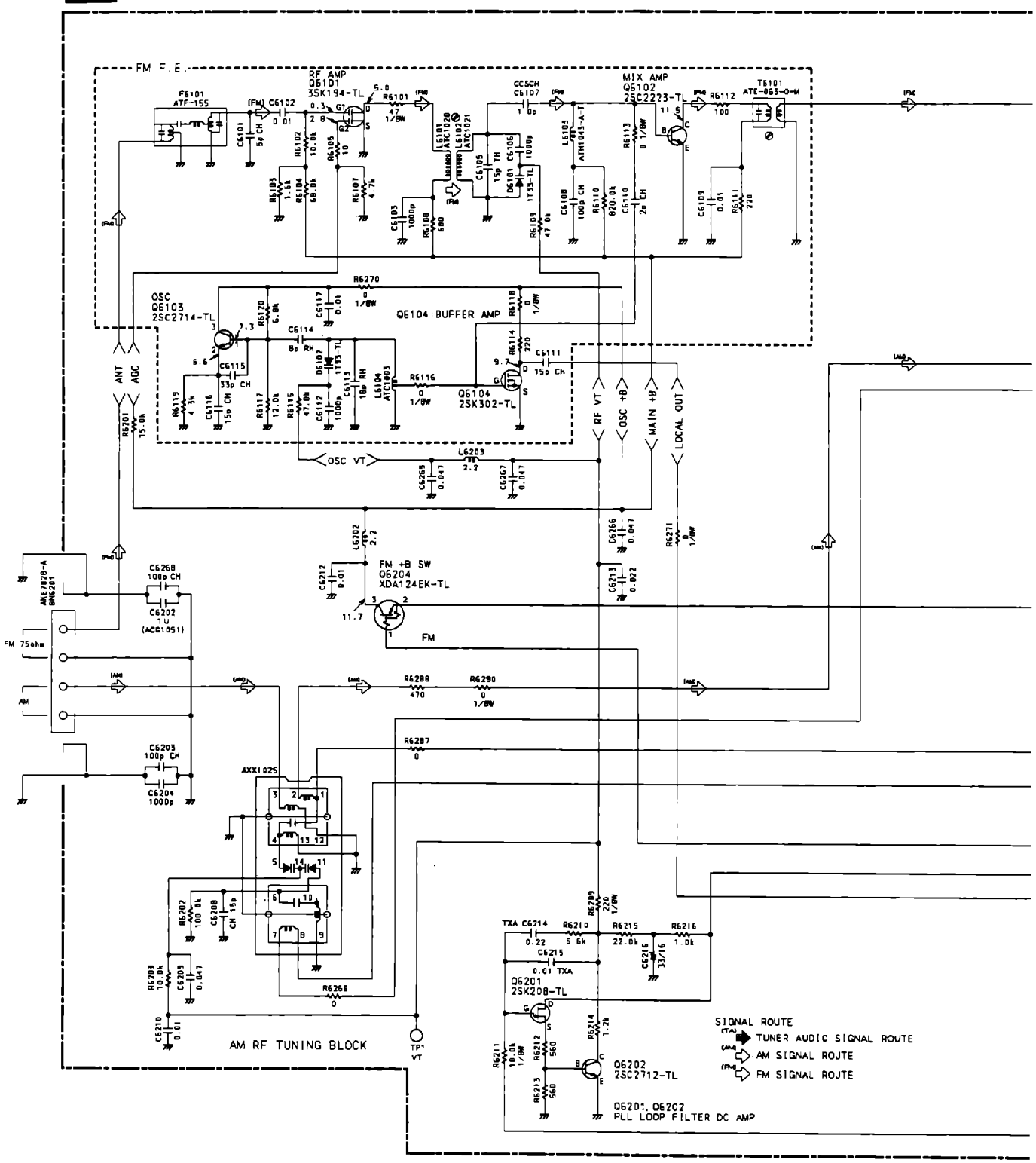
(V)⇨: VIDEO SIGNAL ROUTE
(V.REC)⇨: VIDEO REC SIGNAL ROUTE

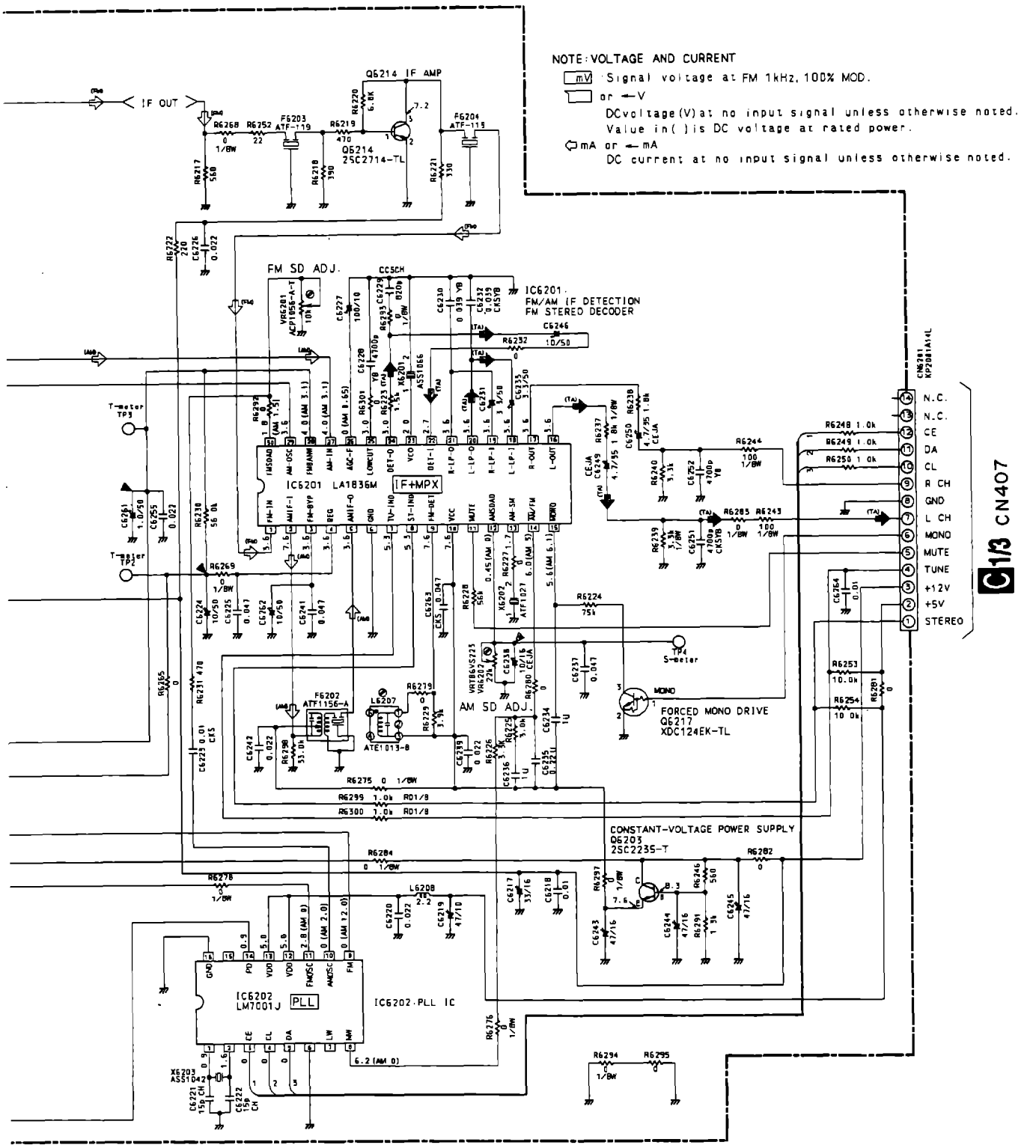

ACN7028
R228 330(2W)
IC281
NJM78M12FA
C281
C283
IC282
C282
C284
CEHAQ47M50
281
51052-0700
V +12V
G (ADG)
A +5V
G (ADG)
REG +B
G (ADG)
REG +B
JB DYY07-250-2651
N REG.2 ASSY
(AWZ8498)
C2/3 211


●NOTE FOR FUSE REPLACEMENT
CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.
M PRIMARY ASSY
(AWZ8865)
FU-1 REK1085(6,3A)
STBY 12.5V
PWR ON 9.6V
POWER RY
RY51
ASR1044
H51-H52
AKR1004
R54
27
1/2W
D55
C54
C55
ACG7020
LIVE
NEUTRAL
AKC-082
POWER TRANSFORMER
AKP1060
SWITCHED
100W
MAX
Q51
KRC101M
CN51
RY
UP
TS
DG
KPE4
R52
3.3K
D54
IC51
NJM78M56FA
5.6V
D51
S5688
R53
10K
D53
MTZJ5.1A
C53
47/16
R51
6.2
C52
470/16
C51
0.01
T51
ATT7018
L52
ATF1006
R55
ACN-208
VNF-091
KN52
AKF-116
AC POWER CORD
PDG1015
LIVE
NEUTRAL
KN51
AKF-116
AC 120V
60Hz

3.11 FM/AM TUNER MODULE

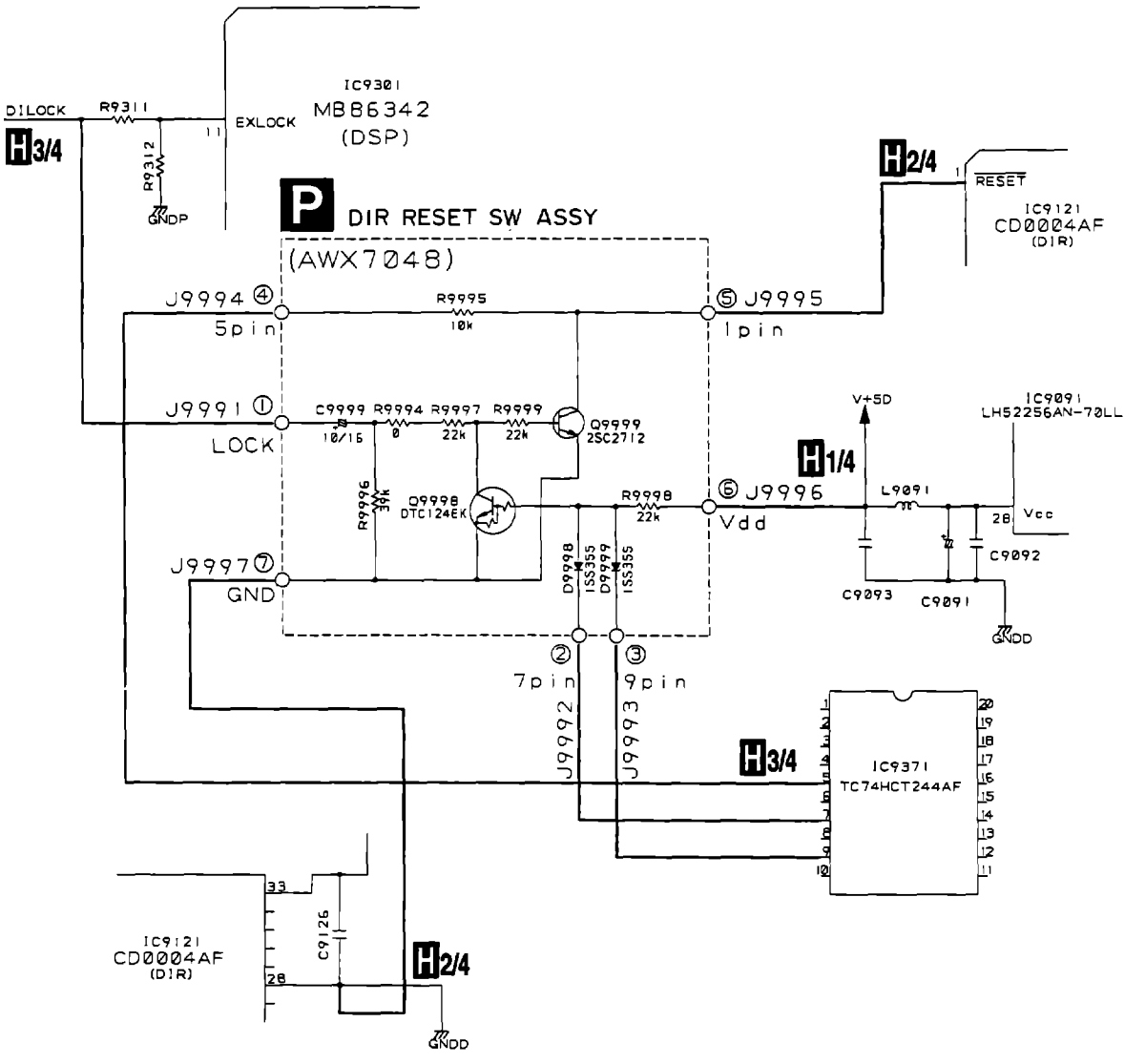
FM/AM TUNER MODULE(AXQ7219)




NOTE: VOLTAGE AND CURRENT
mV Signal voltage at FM 1kHz, 100% MOD.
or ← V
DC voltage (V) at no input signal unless otherwise noted.
Value in ( ) is DC voltage at rated power.
mA or ← mA
DC current at no input signal unless otherwise noted.
IF OUT
Q6214 IF AMP
Q6214 2SC2714-TL
FM SD ADJ.
IC6201
FM/AM IF DETECTION
FM STEREO DECODER
IC6201 LA1836M
IF+MPX
AM SD ADJ.
FORCED MONO DRIVE
Q6217
XDC124EK-TL
CONSTANT-VOLTAGE POWER SUPPLY
Q6203
2SC2235-T
IC6202
LM7001J
PLL
IC6202 PLL IC
S-meter
N.C.
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
C1/3 CN407

3.12 DIR RESET SW ASSY

PLEASE SEE SCHEMATIC DIAGRAM OF
DOLBY DIGITAL ASS'Y (AC-3 ASS'Y).



NOTE

1. RESISTORS

Unit: k:kΩ , M:MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.

2. CAPACITORS

Unit: p:pF or μF unless otherwise noted.
Ratings: Capacity (μF)/Voltage (V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capcitors.

⏚..... CEV

3. ALL JUMPER WIERS (J9991~J9997)

Connect to DOLBY DIGITAL ASS'Y (AC-3 ASS'Y)
ex. (AWX7036-, AWX7037-)

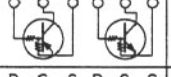
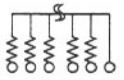
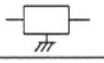
① J9991	ZWNH1571G28-0-12A
② J9992	ZWNH1571G28-1-05A
③ J9993	ZWNH1571G28-2-05A
④ J9994	ZWNH1571G28-3-05A
⑤ J9995	ZWNH1571G28-4-05A
⑥ J9996	ZWNH1571G28-5-05A
⑦ J9997	ZWNH1571G28-6-05A

4. PCB CONNECTION DIAGRAM

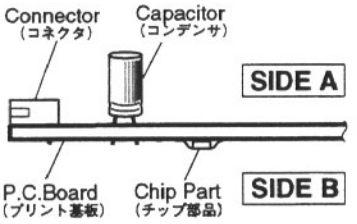
4.1 R/C SPEAKER ASSY AND MOS FET ASSY

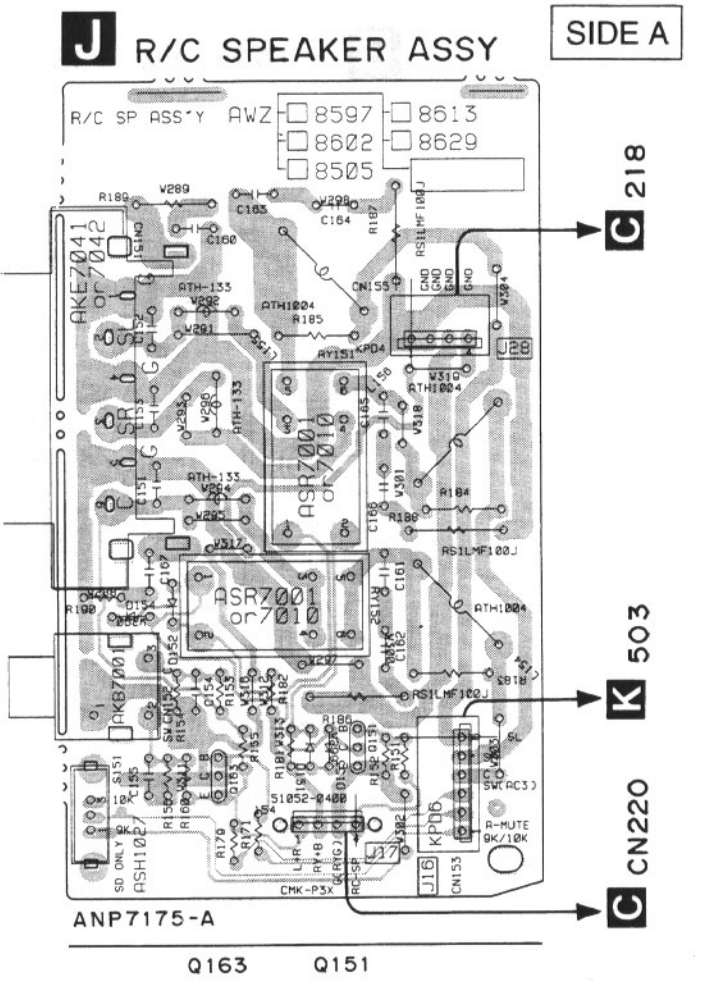
NOTE FOR PCB DIAGRAMS:

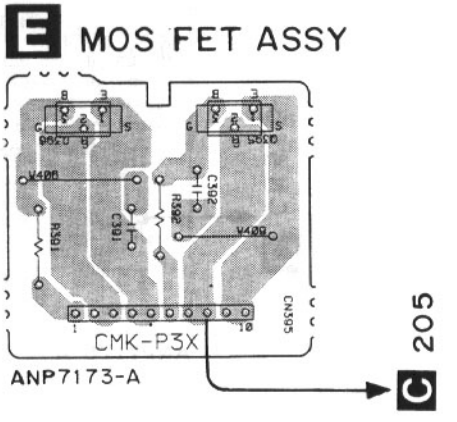
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

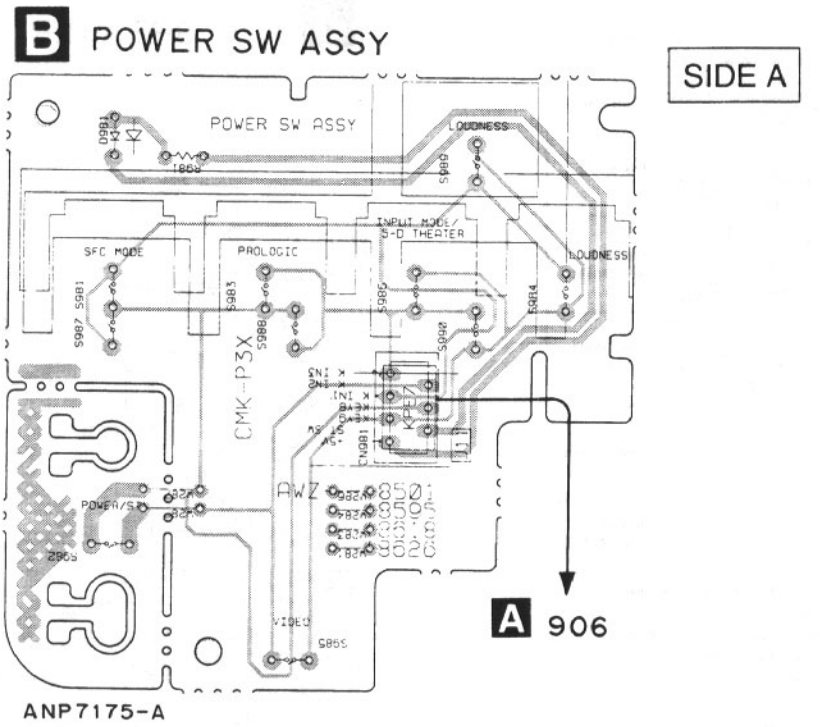
3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further infromation for respective destinations, be sure to check with the schematic diagram.
4. Viewpoint of PCB diagrams

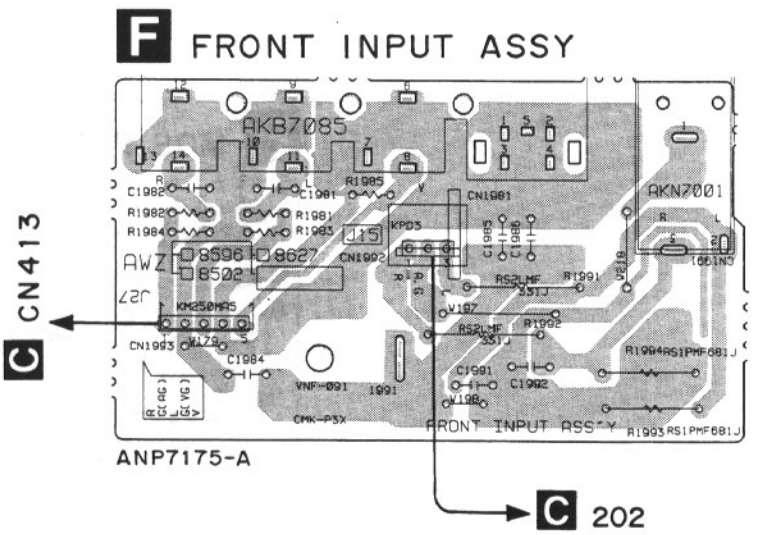






4.2 POWER SWITCH ASSY AND FRONT INPUT ASSY

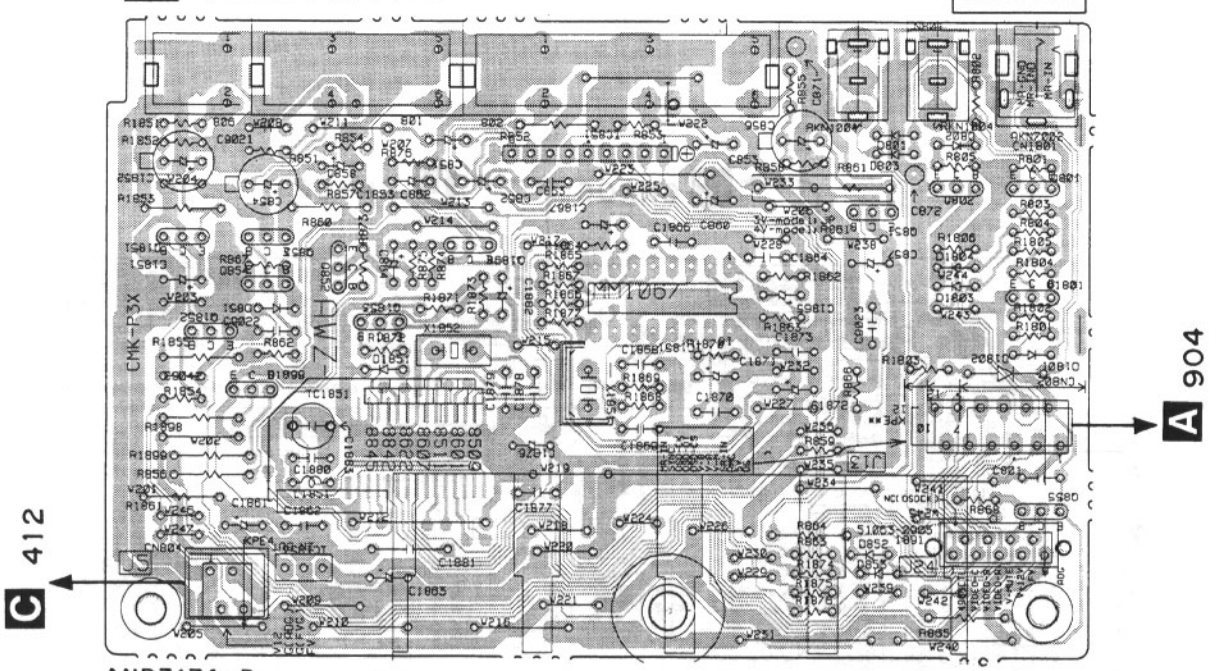




4.3 VIDEO/SR ASSY

L VIDEO/SR ASSY

SIDE A

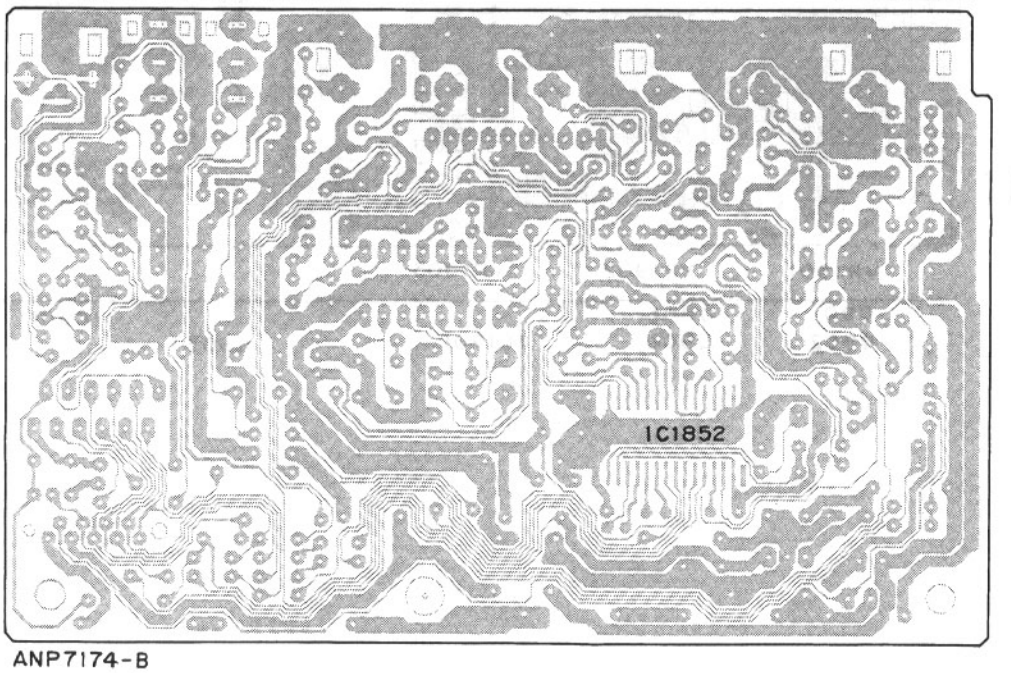


ANP7174-B

Q1851 Q853 Q852 Q1898 IC851 IC1851 Q851 Q802 Q801
Q1852 Q854 Q1853 Q1801
Q1899 IC1853 Q855

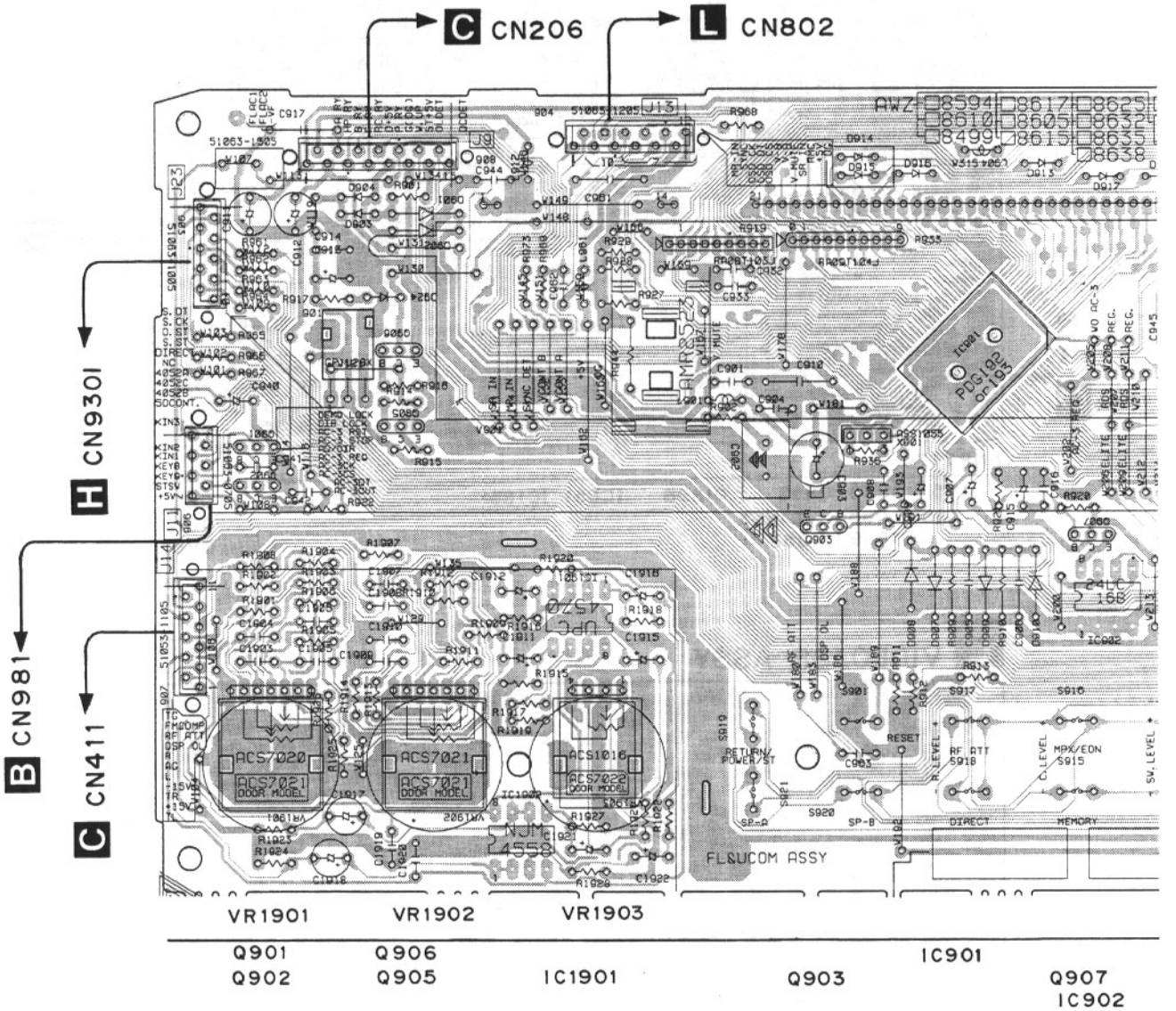
L VIDEO/SR ASSY

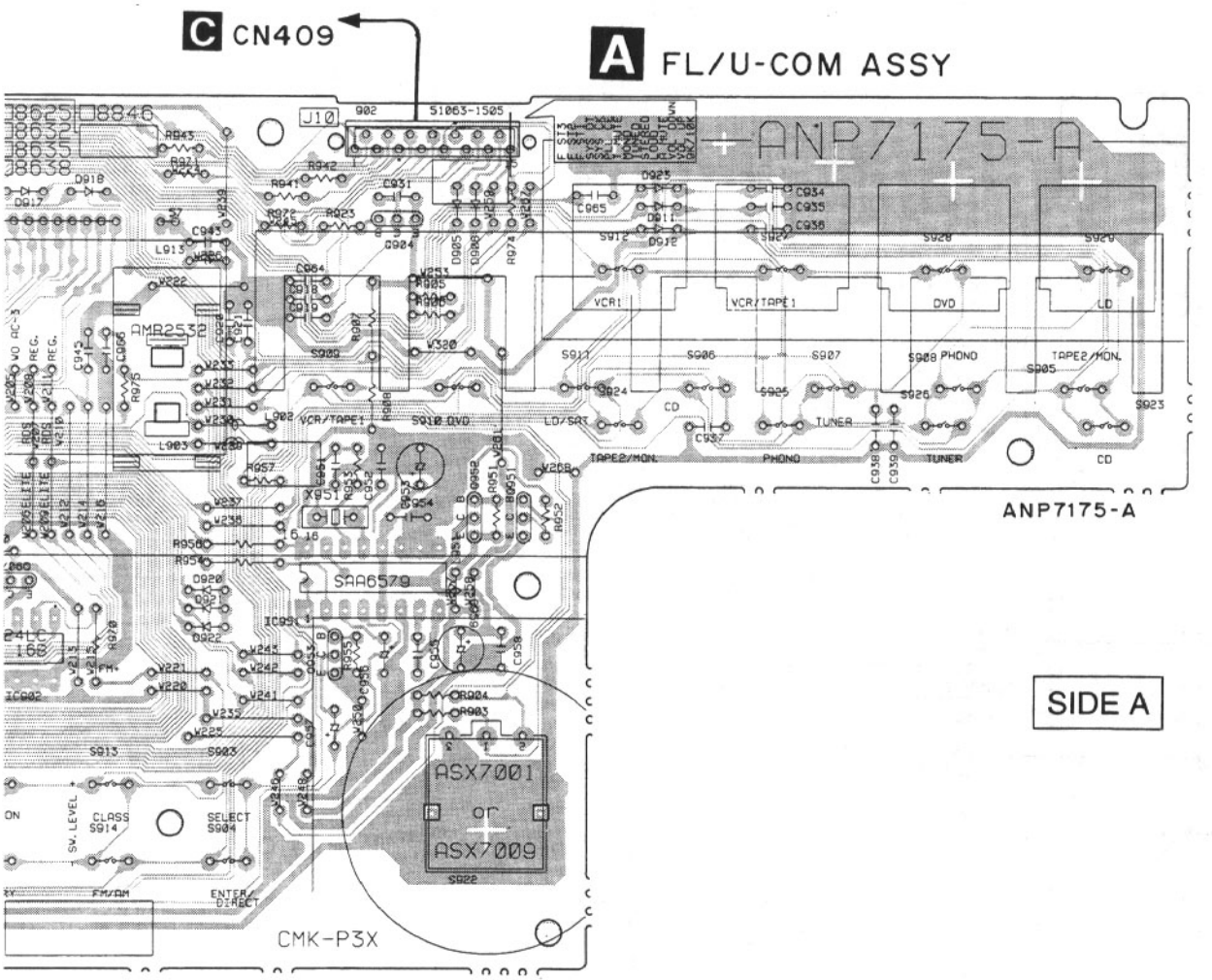
SIDE B

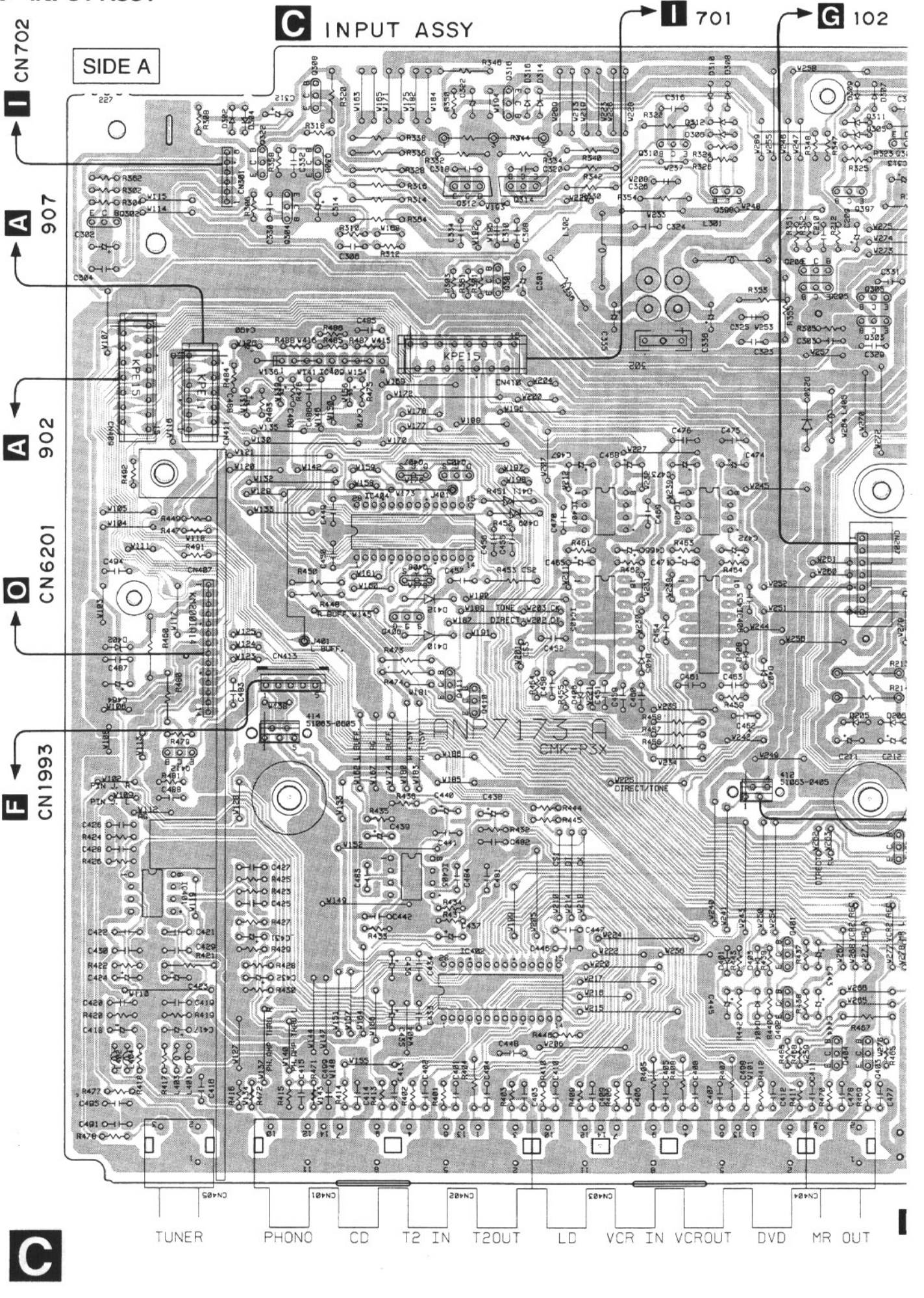


ANP7174-B

4.4 FL/U-COM ASSY

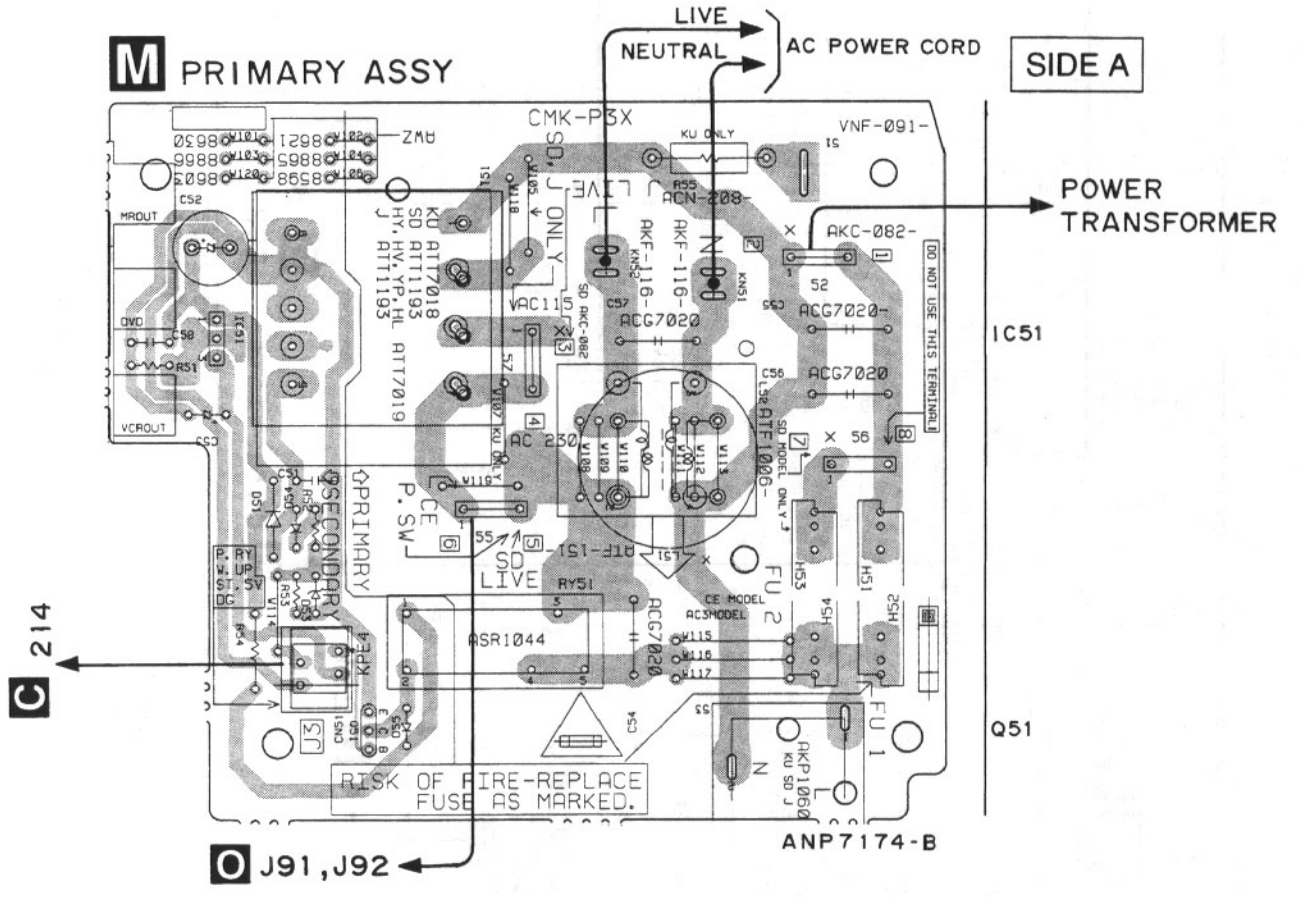



C CN409
A FL/U-COM ASSY
ANP7175-A
ANP7175-A
SIDE A
CMK-P3X
ASX7001
or
ASX7009
SAA6579
AMR2532
VCR1
VCR/TAPE1
DVD
LD
TAPE2/MON.
PHOND
TUNER
CD
Q904
IC951 Q952 Q951

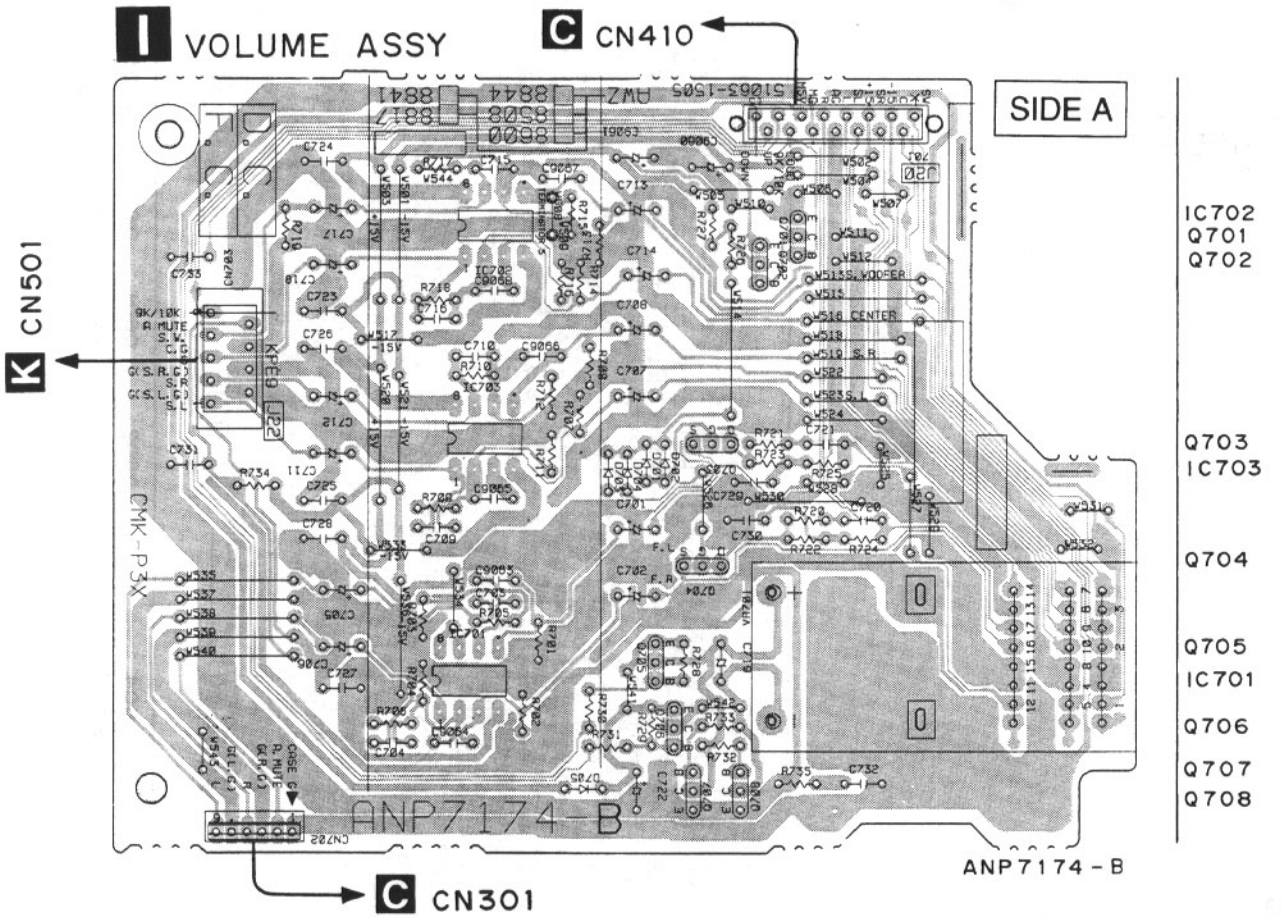

C INPUT ASSY
I 701
G 102
I CN702
SIDE A
A 907
A 902
O CN6201
F CN1993
KPE15
KPE15
CMK-R3X
TUNER
PHONO
CD
T2 IN
T2OUT
LD
VCR IN
VCROUT
DVD
MR OUT
C

H CN9801
A 901
G 101
N 281
D 292
M CN51
D 291
K CN502
E CN395
F CN1992
L CN801
H CN9661
J 154
J CN155
ANP7173-A
KPE15
Q404 IC402 IC401 Q412 Q411 Q406 Q408 IC404 Q407
Q403 Q402 Q401 Q409 IC403 Q410 IC405 IC407 Q405
Q202 Q203 Q208 IC406 IC408
Q211 Q201 Q207 Q210 IC202 IC203
IC409 Q301 Q302 Q322 Q304 Q306 Q308 Q312 Q316 Q314 Q398 Q310 Q205 Q206 Q397 Q303 Q305 Q309 IC201 Q313 Q315 Q311 Q321 Q307

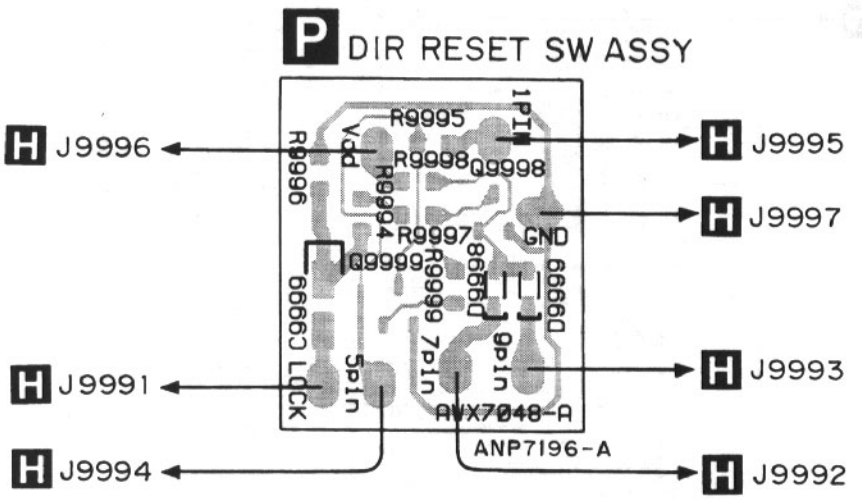
4.6 TRANS ASSY, REG.1 ASSY AND PRIMARY ASSY



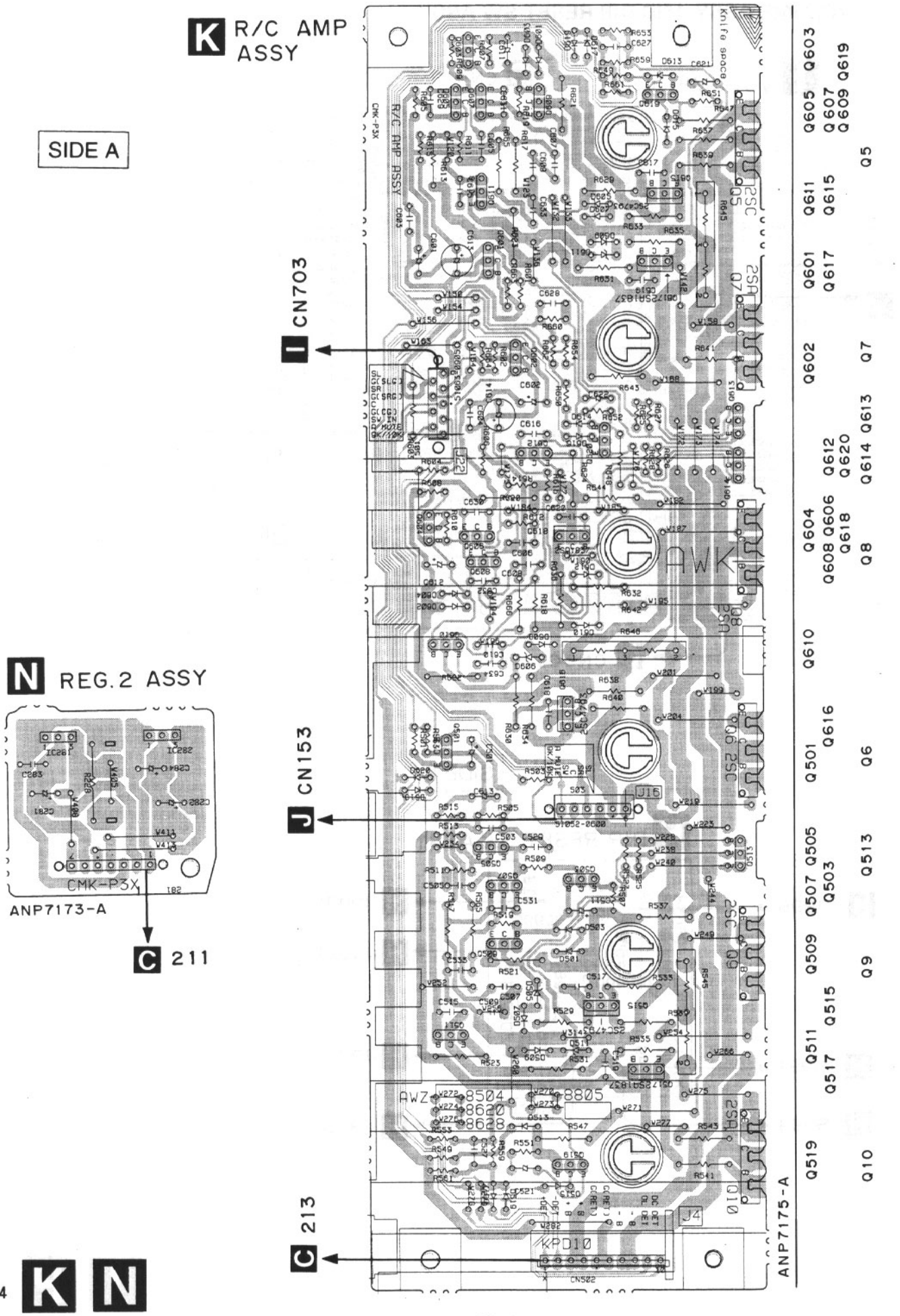
4.7 VOLUME ASSY AND DIR RESET SW ASSY



SIDE B

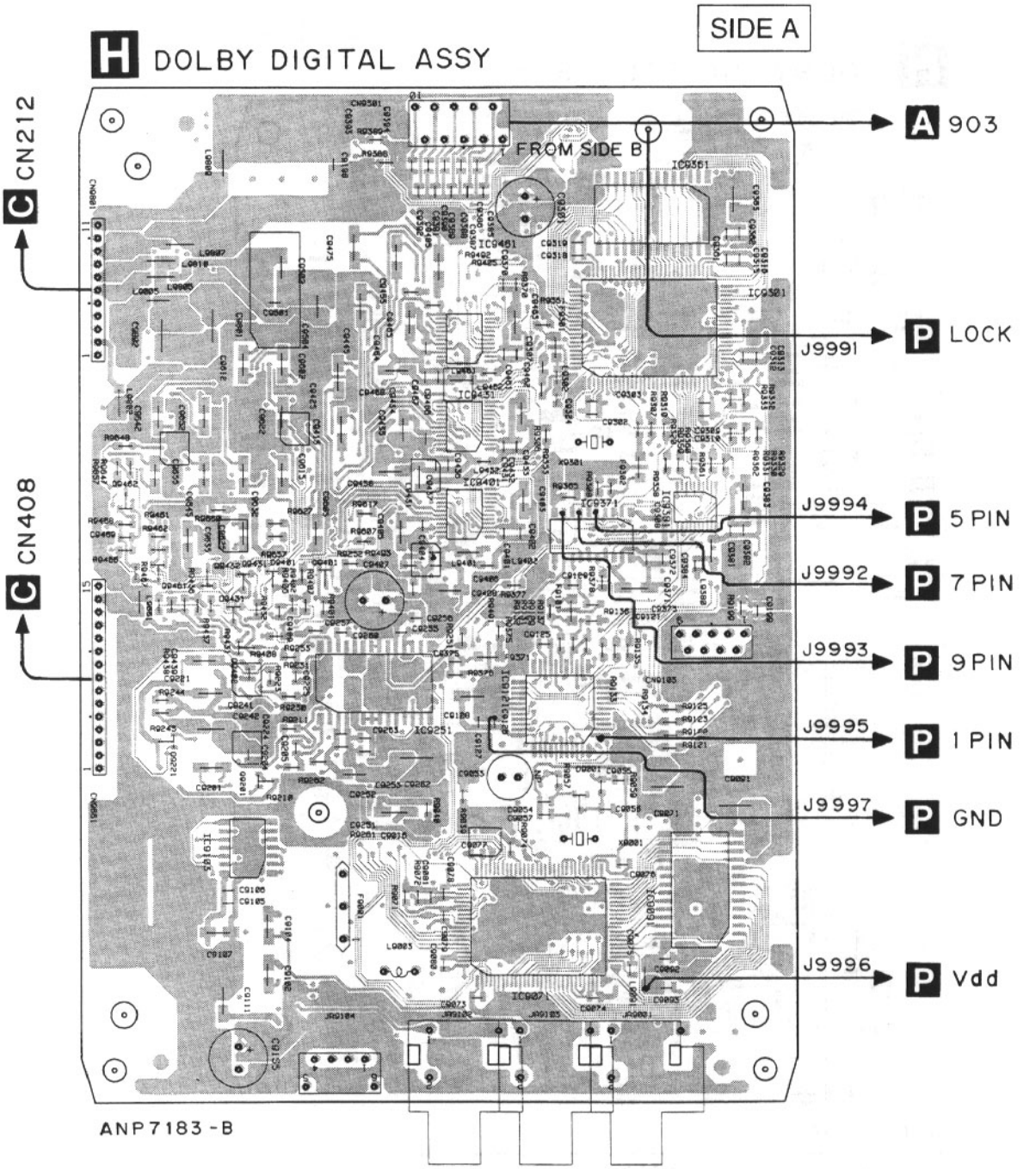


4.8 R/C AMP ASSY AND REG.2 ASSY



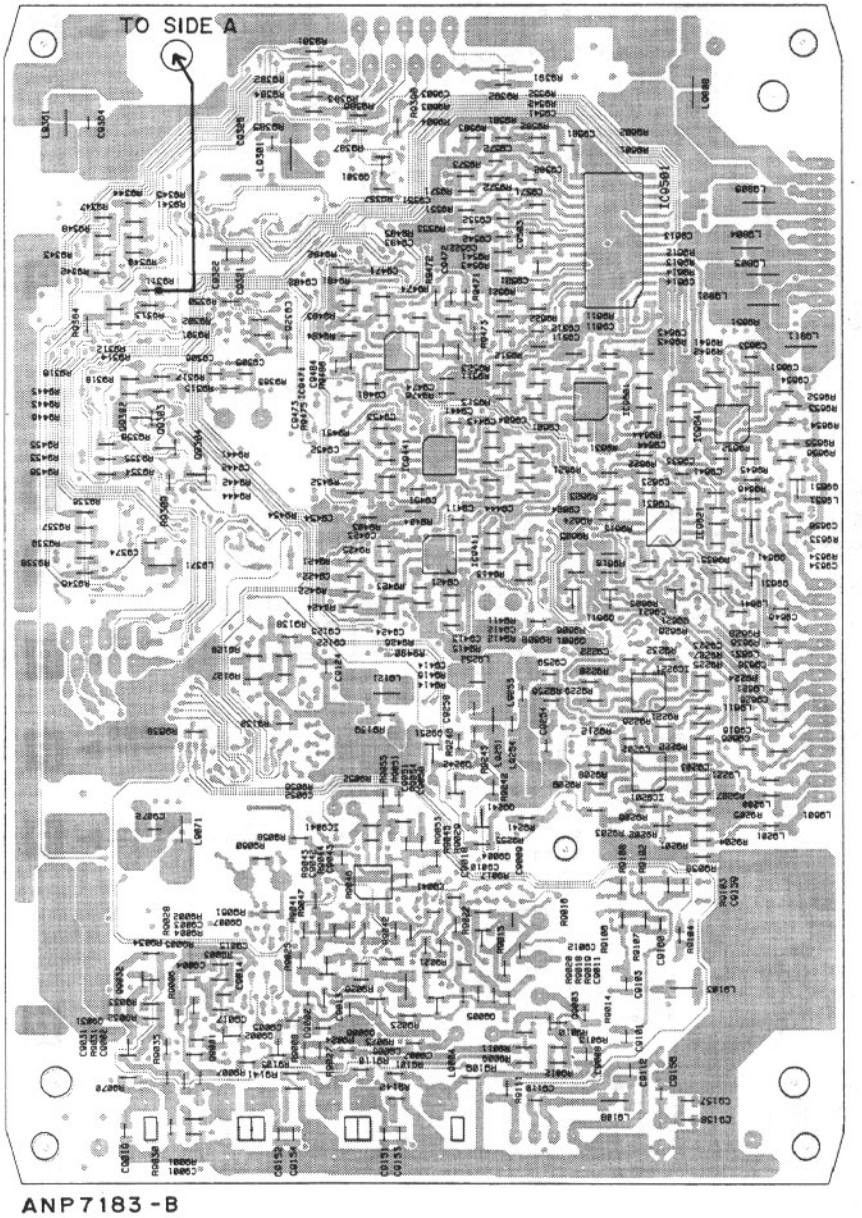
4.9 DOLBY DIGITAL ASSY

- **This diagram has four layers. In the two middle layers, mainly Vcc and GND are connected.**



SIDE B

H DOLBY DIGITAL ASSY

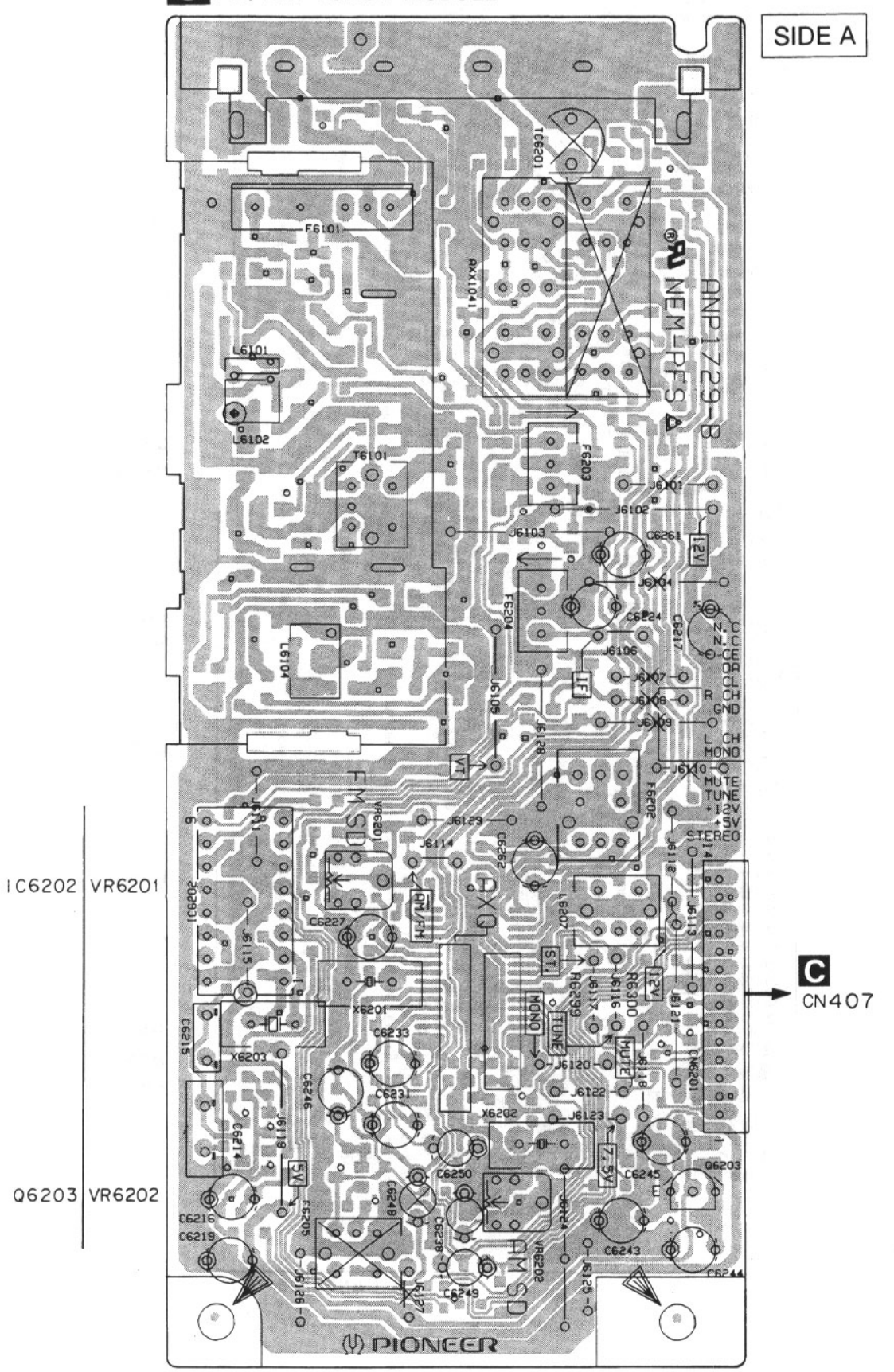


ANP7183-B

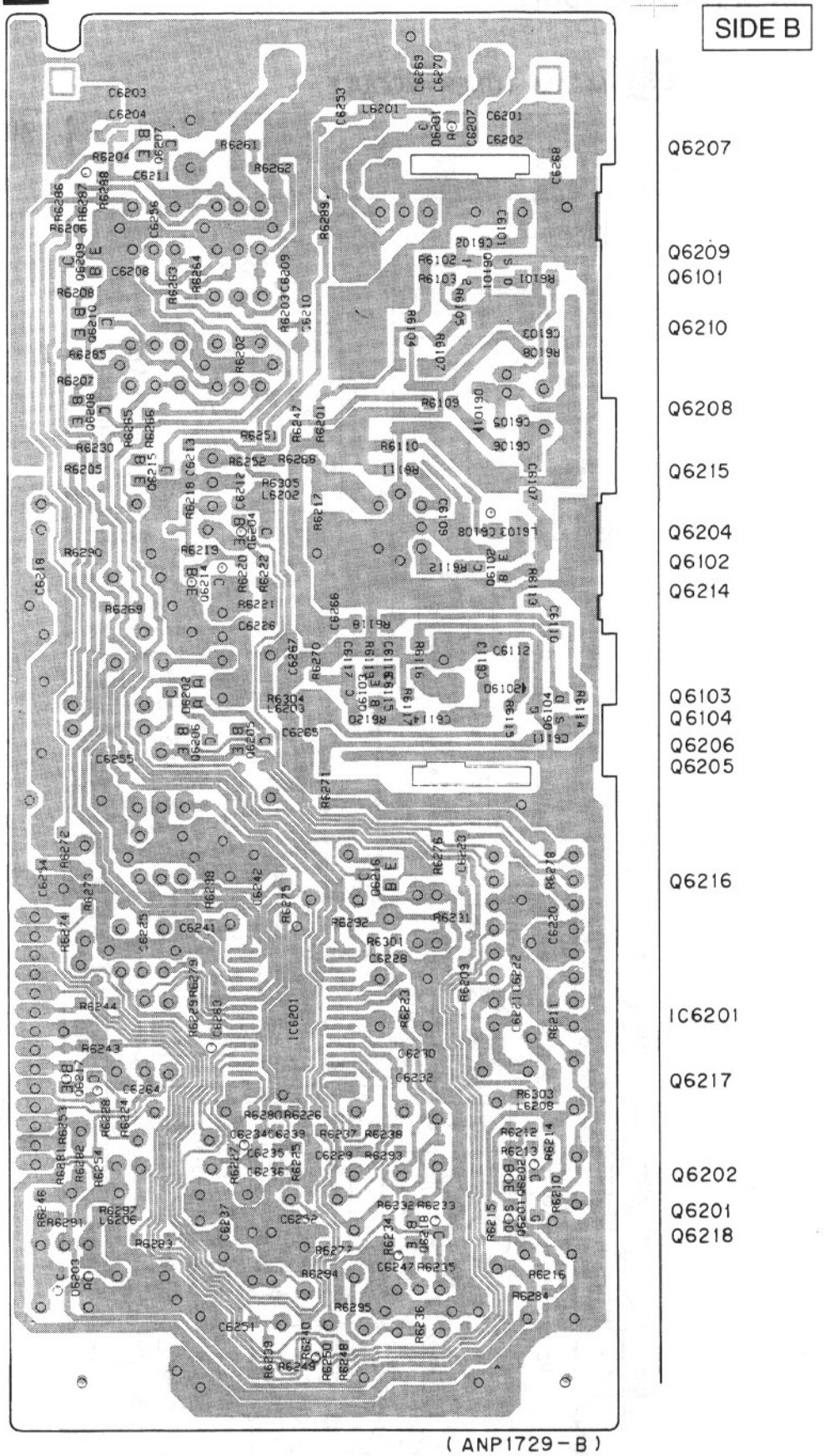
Q9302 Q9301 IC9051
Q9303 IC9441 IC9601 IC9641
Q9304 Q9611 IC9621 Q9641
Q9251 IC9221 Q9631
Q9242 IC9201
Q9032 IC9041 Q9241
Q9031 Q9006 Q9005 Q9003

4.10 FM/AM TUNER MODULE

O FM/AM TUNER MODULE



FM/AM TUNER MODULE



(ANP1729-B)

5. PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 × 10¹ → 561 ..... RD1/4PU 5611 J
47 kΩ → 47 × 10³ → 473 ..... RD1/4PU 4733 J
0.5 Ω → R50 ..... RN2H R50 K
1 Ω → 1R0 ..... RS1P 1R0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 kΩ → 562 × 10¹ → 5621 ..... RN1/4PC 5621 F

Mark	No.	Description	Parts No.
		LIST OF ASSEMBLIES	
NSP		MOTHER ASSY	AWK7317
		├ INPUT ASSY	AWZ8495
		├ TRANS ASSY	AWZ8496
NSP		├ MOS FET ASSY	AWZ8497
		└ REG.2 ASSY	AWZ8498
NSP		FRONT & R/C AMP ASSY	AWK7316
		├ FL/U-COM ASSY	AWZ8499
NSP		├ POWER SWITCH ASSY	AWZ8501
NSP		├ FRONT INPUT ASSY	AWZ8502
		├ R/C AMP ASSY	AWZ8504
		├ R/C SPEAKER ASSY	AWZ8505
		└ REG.1 ASSY	AWZ8507
NSP		COMPLEX ASSY	AWK7318
		├ VOLUME ASSY	AWZ8508
		├ VIDEO/SR ASSY	AWZ8509
NSP		└ PRIMARY ASSY	AWZ8865
		DOLBY DIGITAL ASSY	AWX7036
NSP		DIR RESET SW ASSY	AWX7048
		FM/AM TUNER MODULE	AXQ7219
		C INPUT ASSY	
		SEMICONDUCTORS	
	IC202 ,IC203 ,IC403 ,IC407,IC408		NJM4558D-D
	IC409		NJM4558LD
	IC201		NJM78M56FA
	IC404		TC9162AN
	IC402		TC9273N-007
	IC405 ,IC406		TC9299P
	IC401		UPC4570C
	Q210		2SA1145
⚠	Q307 ,Q308		2SA1321
⚠	Q313 ,Q314		2SA1837
	Q321 ,Q322		2SA970
	Q303 -Q306		2SA992
	Q205 ,Q206 ,Q397 ,Q398		2SC1740S
	Q401 ,Q402		2SC1740S
	Q315 ,Q316		2SC2240
	Q208		2SC2705
	Q207 ,Q301 ,Q302		2SC2878
⚠	Q309 ,Q310		2SC3334
⚠	Q311 ,Q312		2SC4793
	Q201 -Q203 ,Q211		KRC101M
	D201 -D203 ,D224 ,D230 -D233		1SS252
	D301 -D304 ,D313 -D316		1SS252
	D324 -D327 ,D403 -D408		1SS252
	D212 ,D213		D5SBA20
	D209 ,D210		MTZJ18B
	D223		MTZJ20A
	D401 ,D402		MTZJ5.1B
	D222		MTZJ5.1C
	D205 ,D206		MTZJ6.2B
	D214 -D221		S5688G
		COILS AND FILTERS	
	L301 ,L302 (0.7μH)		ATH1004
		SWITCHES AND RELAYS	
	S201		ASH1027
	RY201 -RY204		ASR7001
		CAPACITORS	
	C227 ,C228 (0.01μF/AC150V)		ACG1005
	C216 ,C217 (8200μF/71V)		ACH7018
	C307 ,C308		CCCSL100D2H
	C446 -C448 ,C455 -C463		CCCSL101J50
	C317 -C320		CCCSL101K2H
	C303 ,C304		CCCSL151J50
	C315 ,C316		CCCSL5R0C2H
	C321 ,C322		CEANP2R2M50
	C211 ,C212		CEAS100M25
	C417 ,C418		CEAS100M50
	C226 ,C311 ,C312		CEAS101M10
	C313 ,C314 ,C423 ,C424		CEAS101M25
	C218 ,C219		CEAS101M2A
	C222		CEAS102M35
	C214 ,C215 ,C445		CEAS1R0M50
	C209		CEAS221M10
	C301 ,C302 ,C437 ,C438		CEAS2R2M50
	C443 ,C444		CEAS2R2M50
	C220		CEAS332M16
	C223		CEAS470M16
	C224 ,C435 ,C436 ,C439 ,C440		CEAS470M25
	C464		CEAS470M25
	C335 ,C336		CEAS4R7M2A
	C229 ,C431 ,C432 ,C465 -C468		CEAS4R7M50
	C471 -C474 ,C479 ,C480		CEAS4R7M50

Mark	No.	Description	Parts No.
	C489 ,C490		CEAS4R7M50
	C323 ,C324		CFTXA473J50
	C491		CGCYX103M16
	C495		CGCYX104M12
	C429 ,C430 ,C433 ,C434		CGCYX473M25
	C441 ,C442 ,C449 -C454		CGCYX473M25
	C469 ,C470 ,C475 ,C476 ,C487		CGCYX473M25
	C305 ,C306		CKCYB102K2H
	C210		CKCYB102K50
	C225 ,C485 ,C486		CKCYF103Z50
	C427 ,C428		CQMA242J50
	C425 ,C426		CQMA822J50
	C221 (4700µF/35V)		RCH1107
RESISTORS			
⚠	R343 ,R344 (0.33Ω, 5W)		ACN7001
	R319 ,R320		RD1/4LMF680J
	R315 ,R316		RD1/4PM104J
	R313 ,R314		RD1/4PM362J
⚠	R353 ,R354		RD1/4PMF100J
⚠	R327 -R334		RD1/4PMF101J
⚠	R345 ,R346		RD1/4PMF472J
⚠	R321 ,R322		RF1/4PS101J
⚠	R337 -R340		RF1/4PS4R7J
⚠	R335 ,R336 ,R341 ,R342		RF1/4PS8R2J
	R355 ,R356		RS1LMF100J
	R460		RS1PMF181J
	R213 ,R214		RS1PMF271J
	R226		RS3LMF270J
	R225		RS3LMF560J
	Other Resistors		RD1/4PU□□□J
OTHERS			
		CABLE HOLDER (3P)	51052-0300
		CABLE HOLDER (4P)	51052-0400
		CABLE HOLDER (7P)	51052-0700
		CABLE HOLDER (8P)	51052-0800
		CABLE HOLDER (10P)	51052-1000
		CABLE HOLDER (11P)	51052-1100
		CABLE HOLDER (4P)	51063-0405
		PIN JACK (4P)	AKB7014
	CN401 ,CN404	PIN JACK (4P)	AKB7015
	CN201	SPEAKER TERMINAL 8-P	AKE7006
	J402	BOARD IN WIRE	DB022ND0
	J404	BOARD IN WIRE	DB832ND2
	CN407	14P PLUG	KM200IA14
	CN212	11P PLUG	KM200TA11
	CN408	15P PLUG	KM200TA15
	CN301	6P PLUG	KM200TA6
	CN413	PLUG 5-P	KM250MA5
	CN411	CONNECTOR (11P)	KPE11
	CN206 ,CN409 ,CN410	CONNECTOR (15P)	KPE15
		GROUND PLATE	VNF-091

Mark	No.	Description	Parts No.
D TRANS ASSY			
SEMICONDUCTORS			
	D291 ,D292		S5688G
CAPACITORS			
	C295		CEAS470M50
RESISTORS			
	All Resistors		RD1/4PU□□□J
OTHERS			
		CABLE HOLDER (8P)	51052-0800
		CABLE HOLDER (11P)	51052-1100
	H291 -H296	FUSE CLIP	AKR1004
E MOS FET ASSY			
SEMICONDUCTORS			
	Q395		IRF540A
	Q396		IRF9540A
RESISTORS			
⚠	R391 ,R392		RD1/4PMF101J
	Other Resistors		RD1/4PM□□□J
N REG.2 ASSY			
SEMICONDUCTORS			
	IC282		NJM78M05FA
	IC281		NJM78M12FA
CAPACITORS			
	C282		CEAS101M10
	C281		CEAS101M16
	C284		CEHAQ470M50
	C283		CGCYX103M25
RESISTORS			
	R228		RS2LMF331J
OTHERS			
		CABLE HOLDER (7P)	51052-0700
A FL/U-COM ASSY			
SEMICONDUCTORS			
	IC1902		NJM4558D-D
	IC901		PDG192A
	IC1901		UPC4570C
	Q904		2SA933S
	Q905 ,Q906		2SC1740S
	Q901 ,Q903		KRC101M
	Q902		KRC103M
	D901 -D912 ,D914 -D918 ,D921		1SS252
	D923 -D925		1SS252
COILS AND FILTERS			
	L901		LAU2R2J

Mark	No.	Description	Parts No.
SWITCHES AND RELAYS			
	S901 ,S903 -S911 ,S913 -S916		ASG1034
	S918 -S921		ASG1034
	S922		ASX7001
CAPACITORS			
	C902		ACH7058
	C932 ,C933		CCPUSL220J50
	C1911 ,C1912 ,C1915 -C1918		CEAS100M50
	C911		CEAS101M25
	C967		CEAS220M16
	C903		CEAS221M10
	C1921 ,C1922 ,C907 ,C909		CEAS2R2M50
	C940		CEAS470M16
	C913		CEAS470M25
	C912		CEAS470M50
	C1907 ,C1908		CFTXA123J50
	C1905 ,C1906		CFTXA274J50
	C1903 ,C1904		CFTXA473J50
	C1909 ,C1910		CFTXA563J50
	C1919 ,C1920		CGCYX103M16
	C908		CGCYX104M16
	C914		CKCYF103Z50
	C917 ,C931 ,C934 -C939		CKPUYB101K50
	C941 ,C942		CKPUYB101K50
	C919		CKPUYB102K50
	C943 ,C944		CKPUYF103Z25
	C905 ,C906		CKPUYF473Z16
	C901 ,C904 ,C918 ,C945 ,C965		CKPUYY103M16
	C910		CKPYF103Z50
RESISTORS			
	R919		RA8T103J
	VR1903 (500KΩ-B)		ACS1016
	VR1901,VR1902(30KΩ-20Ax2)		ACS7020
	Other Resistors		RD1/4PU□□□J
OTHERS			
		CABLE HOLDER (7P)	51063-0705
		CABLE HOLDER (10P)	51063-1005
		CABLE HOLDER (11P)	51063-1105
		CABLE HOLDER (12P)	51063-1205
		CABLE HOLDER (15P)	51063-1505
	V901	FL TUBE	AAV7034
	X901 (7.70MHz)		ASS1055

B POWER SWITCH ASSY

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	D981	LED (RED)	AEL1065
SWITCHES AND RELAYS			
	S981 -S986		ASG1034
RESISTORS			
	All Resistors		RD1/4PU□□□J
OTHERS			
	CN981	CONNECTOR (7P)	KPE7

F FRONT INPUT ASSY

Mark	No.	Description	Parts No.
CAPACITORS			
	C1984 -C1986		CGCYX473M16
RESISTORS			
	R1991 ,R1992		RS2LMF331J
	Other Resistors		RD1/4PU□□□J
OTHERS			
	CN1981	PIN JACK (3P)	AKB7085
	CN1991	JACK	AKN7001
	CN1993	PLUG 5-P	KM250MA5

K R/C AMP ASSY

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	Q509 ,Q609 ,Q610		2SA1321
⚠	Q517 ,Q617 ,Q618		2SA1837
	Q503 ,Q603 ,Q604		2SA970
	Q505 ,Q507 ,Q605 -Q608		2SA992
⚠	Q513 ,Q613 ,Q614		2SC1740S
	Q519 ,Q619 ,Q620		2SC2240
	Q501 ,Q601 ,Q602		2SC2878
	Q511 ,Q611 ,Q612		2SC3334
⚠	Q515 ,Q615 ,Q616		2SC4793
	D501 ,D503 ,D513 ,D515 ,D517		1SS252
	D519 ,D601 -D604 ,D613 -D620		1SS252
CAPACITORS			
	C517 ,C519 ,C617 -C620		CCCSL101K2H
	C507 ,C607 ,C608		CCCSL120K2H
	C503 ,C603 ,C604		CCCSL151J50
	C515 ,C615 ,C616		CCCSL5R0C2H
	C521 ,C621 ,C622		CEANP2R2M50
	C511 ,C611 ,C612		CEAS101M10
	C513 ,C613 ,C614		CEAS101M25
	C501 ,C601 ,C602		CEAS2R2M50
	C505 ,C605 ,C606		CKCYB102K2H
RESISTORS			
⚠	R545 ,R645 ,R646 (0.33Ω, 5W)		ACN7001
	R521 ,R621 ,R622		RD1/4LMF680J
	R517 ,R617 ,R618		RD1/4PM104J
⚠	R529 ,R531 ,R533 ,R535		RD1/4PMF101J
⚠	R629 -R636		RD1/4PMF101J
⚠	R547 ,R647 ,R648		RD1/4PMF472J
⚠	R523 ,R623 ,R624		RF1/4PS101J
⚠	R539 ,R541 ,R639 -R642		RF1/4PS4R7J
⚠	R537 ,R543 ,R637 ,R638		RF1/4PS8R2J
⚠	R643 ,R644		RF1/4PS8R2J
	Other Resistors		RD1/4PU□□□J
OTHERS			
		CABLE HOLDER (6P)	51052-0600
		CABLE HOLDER (9P)	51063-0905

Mark	No.	Description	Parts No.

J R/C SPEAKER ASSY

SEMICONDUCTORS

	Q151	2SC1740S
	Q163	2SC2878
	D151 ,D152	1SS252

COILS AND FILTERS

	L154 -L156 (0.7μH)	ATH1004

SWITCHES AND RELAYS

	RY151 ,RY152	ASR7001

CAPACITORS

	C161 ,C163 ,C165	CFTXA473J50

RESISTORS

	R183 -R185	RD1/4PMF100J
	R186 -R188	RS1LMF100J
	Other Resistors	RD1/4PU□□□J

OTHERS

	CABLE HOLDER (4P)	51052-0400
CN152	2P PIN JACK	AKB7001
CN151	SPEAKER TERMINAL 6-P	AKE7041

G REG.1 ASSY

SEMICONDUCTORS

	IC103	NJM78M05FA
	IC101	NJM78M15FA
	IC102	NJM79M15FA
	IC104	PQ20RV1E
	D101	1SS252

CAPACITORS

	C107	CEAS101M10
	C105 ,C106	CEAS101M16
	C108	CEAS470M10
	C104	CEHAQ470M25
	C101 -C103	CKCYF103Z50

RESISTORS

	R102	RN1/4PC3000F
	R103	RN1/4PC5100F
	R101	RS3LMF8R2J

OTHERS

	CABLE HOLDER (6P)	51052-0600
	CABLE HOLDER (7P)	51052-0700

I VOLUME ASSY

SEMICONDUCTORS

	IC701 -IC703	UPC4570C
	Q705 ,Q706	2SA1115
	Q707 ,Q708	2SC2603
	Q703 ,Q704	2SK246
	Q702	KRA103M
	Q701	KRC103M
	D701 ,D703 ,D705	1SS252

Mark	No.	Description	Parts No.

CAPACITORS

	C720 ,C721	CCCSL271J50
	C703 ,C704	CCPUSL330J50
	C719	CEANP100M50
	C722	CEAS220M50
	C701 ,C702 ,C705 -C708	CEAS4R7M50
	C711 -C714 ,C717 ,C718	CEAS4R7M50
	C729 ,C730	CFTXA473J50
	C723 -C728	CGCYX104M25
	C715	CKPUYB681K50
	C709 ,C710 ,C716	CKPUYB820K50

RESISTORS

	VR701 (100KΩ-A5x6)	ACX7028
	Other Resistors	RD1/4PU□□□J

OTHERS

	CABLE HOLDER (15P)	51063-1505
CN702	6P SOCKET	KP200TA6L
CN703	CONNECTOR (9P)	KPE9

L VIDEO S/R ASSY

SEMICONDUCTORS

	IC851	LA7952
	Q801 ,Q855	2SA933S
	Q1898 ,Q1899 ,Q851 -Q854	2SC1740S
	Q802	KRC103M
	D801 ,D802 ,D851 -D853	1SS252

CAPACITORS

	C1853	CEANP4R7M50
	C857 ,C858 ,C860	CEAS470M25
	C854 ,C856	CEAS471M6R3
	C851 -C853 ,C864	CEAS4R7M50
	C863	CKCYB102K50
	C801	CKCYF103Z50

RESISTORS

	R860 ,R861	RD1/4PM331J
	Other Resistors	RD1/4PU□□□J

OTHERS

	JACK (2P)	AKB7016
	RCA PIN JACK	AKB7018
CN804	CONNECTOR (4P)	KPE4
CN802	CONNECTOR (7P)	KPE7
JA803 ,JA807	JACK	RKN1004

M PRIMARY ASSY

SEMICONDUCTORS

	IC51	NJM78M56FA
	Q51	KRC101M
	D54 ,D55	1SS252
	D53	MTZJ5.1A
	D51	S5688G

COILS AND FILTERS

	L52	ATF1006

TRANSFORMERS

⚠	T51	ATT7018

Mark	No.	Description	Parts No.
SWITCHES AND RELAYS			
	RY51		ASR1044
CAPACITORS			
	C54 ,C55 (0.01μF/AC250V)		ACG7020
	C53		CEAS470M16
	C52		CEAS471M16
	C51		CGCYX103M25
RESISTORS			
	R55 (2.2MΩ, 1/2W)		ACN-208
	R54		RD1/2PM270J
	Other Resistors		RD1/4PU□□□J
OTHERS			
		SOCKET 1-P	AKP1060
	H51,H52	FUSE CLIP	AKR1004
	CN51	CONNECTOR (4P)	KPE4
		GROUND PLATE	VNF-091

H DOLBY DIGITAL ASSY

SEMICONDUCTORS		
	IC9401,IC9431,IC9461	AK4319-VM
	IC9251	AK5340-VS
	IC9121	CD0004AF
	IC9361	KM62V256CLG-7L
	IC9091	LH52256AN-70LL
	IC9301	MB86342A
	IC9201,IC9221	NJM2100M
	IC9041,IC9411,IC9441,IC9471,IC9601	NJM4558MD
	IC9621,IC9641	NJM4558MD
	IC9501	PA4025A
	IC9071	PM4007A
	IC9371	TC74HCT244AF
	IC9103	TC74HCU04AF
	IC9381	TC74LVX244FS
	Q9007 ,Q9241 ,Q9401 ,Q9431 ,Q9461	2PB709A
	Q9003 ,Q9031 ,Q9032 ,Q9242 ,Q9402	2PD601A
	Q9432 ,Q9462	2PD601A
	Q9201 ,Q9221 ,Q9601 ,Q9611 ,Q9621	2SC3326
	Q9631 ,Q9641 ,Q9651	2SC3326
	Q9001 ,Q9002 ,Q9004 -Q9006	2SC3802K
	Q9304	DTA124EK
	Q9251 ,Q9301 -Q9303	DTC124EK
	D9401 ,D9431	1SS181
	D9002	1SS355
	D9001	KV1851
COILS AND FILTERS		
	F9001 (2.88MHz)	ATF7001
	F9101 ,F9301 ,F9302 ,F9371	ATF7013
	L9003 (68μH)	ATH7001
	L9301 ,L9801 -L9811	ATL7001
	L9200 ,L9201 ,L9221 ,L9252 -L9254	ATX1026
	L9402 ,L9432 ,L9462 ,L9601 ,L9611	ATX1026
	L9621 ,L9631 ,L9641 ,L9651	ATX1026
	L9302	LCTBR47K2125
	L9004 ,L9005 ,L9071 ,L9091 ,L9103	VTL1019
	L9121 ,L9251 ,L9361 ,L9371 ,L9380	VTL1019
	L9401 ,L9431 ,L9461 ,L9661	VTL1019
CAPACITORS		
	C9105 ,C9122 ,C9126 ,C9159 ,C9160	CCSQCH101J50
	C9255 ,C9263 ,C9302 ,C9309 ,C9312	CCSQCH101J50
	C9315 ,C9318 ,C9321 ,C9361 ,C9371	CCSQCH101J50
	C9381 ,C9401 ,C9406 ,C9431 ,C9436	CCSQCH101J50
	C9461 ,C9466	CCSQCH101J50
	C9511 ,C9521 ,C9541 ,C9551 ,C9571	CCSQCH102J50
	C9606 ,C9616 ,C9626 ,C9636 ,C9646	CCSQCH102J50
	C9656	CCSQCH102J50
	C9413 ,C9414 ,C9423 ,C9424	CCSQCH151J50
	C9443 ,C9444 ,C9453 ,C9454	CCSQCH151J50
	C9473 ,C9474	CCSQCH151J50
	C9125 ,C9203 ,C9223 ,C9305 ,C9306	CCSQCH220J50
	C9412 ,C9422 ,C9442 ,C9452 ,C9472	CCSQCH221J50
	C9482	CCSQCH221J50
	C9057	CCSQCH270J50
	C9151 ,C9152 ,C9512 ,C9522 ,C9542	CCSQCH271J50
	C9552 ,C9572	CCSQCH271J50
	C9603 ,C9613 ,C9623 ,C9633 ,C9643	CCSQCH391J50
	C9326 ,C9392	CCSQCH471J50
	C9129 ,C9307 ,C9308 ,C9375	CCSQCH560J50
	C9007	CCSQCH750J50
	C9053	CEANP470M25
	C9301	CEAS102M6R3
	C9257	CEAS471M6R3
	C9107 ,C9128 ,C9201 ,C9221 ,C9241	CEV100M16
	C9403 ,C9405 ,C9408 ,C9433 ,C9435	CEV100M16
	C9438 ,C9463 ,C9465 ,C9468 ,C9502	CEV100M16
	C9504 ,C9602 ,C9605 ,C9612 ,C9615	CEV100M16
	C9622 ,C9625 ,C9632 ,C9635 ,C9642	CEV100M16
	C9645 ,C9652 ,C9655	CEV100M16
	C9016	CEV100M35
	C9071 ,C9091 ,C9262	CEV101M6R3
	C9415 ,C9425 ,C9445 ,C9455 ,C9475	CEV220M16
	C9485	CEV220M16
	C9801 ,C9802	CEV330M25
	C9242 ,C9363 ,C9373 ,C9383	CEV470M6R3
	C9031	CKSQYB102K50
	C9014 ,C9054 ,C9056 ,C9101 ,C9103	CKSQYB103K50
	C9153 ,C9154	CKSQYB103K50
	C9581	CKSQYB104K25
	C9205 ,C9225	CKSQYB152K50
	C9483 ,C9484	CKSQYB153K50
	C9582	CKSQYB273K50
	C9653	CKSQYB393K50
	C9121	CKSQYB473K50
	C9001 -C9006 ,C9008 -C9013 ,C9015	CKSQYF104Z25
	C9017 ,C9018 ,C9043 ,C9051 ,C9052	CKSQYF104Z25
	C9055 ,C9058 ,C9073 -C9081 ,C9092	CKSQYF104Z25
	C9106 ,C9123 ,C9127 ,C9202 ,C9204	CKSQYF104Z25
	C9222 ,C9224 ,C9251 ,C9253 ,C9256	CKSQYF104Z25
	C9259 ,C9303 ,C9310 ,C9313 ,C9316	CKSQYF104Z25
	C9319 ,C9322 ,C9324 ,C9362 ,C9372	CKSQYF104Z25
	C9382 ,C9402 ,C9404 ,C9407 ,C9409	CKSQYF104Z25
	C9411 ,C9421 ,C9432 ,C9434 ,C9437	CKSQYF104Z25

Mark	No.	Description	Parts No.
	C9439 ,C9441 ,C9451 ,C9462 ,C9464		CKSQYF104Z25
	C9467 ,C9469 ,C9471 ,C9481 ,C9501		CKSQYF104Z25
	C9503 ,C9601 ,C9611 ,C9621 ,C9631		CKSQYF104Z25
	C9641 ,C9651		CKSQYF104Z25
	C9041 ,C9042		CKSQYF105Z16
RESISTORS			
	All Resistors		RS1/10S□□□J
OTHERS			
	JA9000	PIN JACK (3P)	AKB7091
	CN9801	11P SOCKET	KP200TA11L
	CN9661	15P SOCKET	KP200TA15L
	CN9301	CONNECTOR (10P)	KPE10
	X9301	CRYSTAL RESONATOR (18.432MHz)	ASS1035
	X9001	CRYSTAL RESONATOR (18.432MHz)	ASS7009

O FM/AM TUNER MODULE

SEMICONDUCTORS

	IC6201	LA1836M
	IC6202	LM7001J
	Q6102	2SC2223
	Q6203	2SC2235
	Q6202	2SC2712
	Q6103 ,Q6214	2SC2714
	Q6201	2SK208
	Q6104	2SK302
	Q6101	3SK194
	Q6204	XDA124EK
	Q6217	XDC124EK
	D6101 ,D6102	1T33

COILS AND FILTERS

	L6104	ATC1003
	L6101	ATC1020
	L6102	ATC1021
	L6207	ATE1013
	F6203 ,F6204	ATF-119
	F6101	ATF-155
	F6202 (450KHz)	ATF1156
	L6103 (2.2μH)	ATH1043
	L6202 ,L6203 ,L6208	LCTA2R2J3225

TRANSFORMERS

	T6101	ATE-063

CAPACITORS

	C6202 ,C6234 ,C6236 (1μF/16V)	ACG1051
	C6229	CCSCH821J50
	C6107	CCSCK1R0C50
	C6108 ,C6203 ,C6268	CCSQCH101J50
	C6111 ,C6116 ,C6208 ,C6221 ,C6222	CCSQCH150J50
	C6115	CCSQCH330J50
	C6101	CCSQCH5R0C50
	C6110	CCSQCK2R0C50
	C6114	CCSQRH080D50
	C6113	CCSQRH180J50

Mark	No.	Description	Parts No.
	C6105		CCSQTH150J50
	C6224 ,C6246 ,C6262		CEAS100M50
	C6227		CEAS101M10
	C6261		CEAS1R0M50
	C6216 ,C6217		CEAS330M16
	C6231 ,C6233		CEAS3R3M50
	C6219		CEAS470M10
	C6243 -C6245		CEAS470M16
	C6238		CEJA100M16
	C6249 ,C6250		CEJA4R7M35
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6103 ,C6106 ,C6112 ,C6204		CKSQYB102K50
	C6102 ,C6109 ,C6117 ,C6210 ,C6264		CKSQYB103K50
	C6213		CKSQYB223K50
	C6230		CKSQYB393K50
	C6228 ,C6252		CKSQYB472K50
	C6209 ,C6237 ,C6265 ,C6267		CKSQYB473K50
	C6212 ,C6218		CKSQYF103Z50
	C6220 ,C6226 ,C6239 ,C6242 ,C6255		CKSQYF223Z50
	C6235		CKSQYF224Z25
	C6225 ,C6241 ,C6266		CKSQYF473Z50
	C6232		CKSYB393K50
	C6251		CKSYB472K50
	C6223		CKSYF103Z50
	C6263		CKSYF473Z50
RESISTORS			
	R6299 ,R6300		RD1/4PU102J
	R6113 ,R6116 ,R6118 ,R6268 -R6271		RS1/8S0R0J
	R6275 ,R6276 ,R6278 ,R6283 ,R6284		RS1/8S0R0J
	R6290 ,R6293 ,R6294 ,R6297		RS1/8S0R0J
	R6243 ,R6244		RS1/8S101J
	R6211		RS1/8S103J
	R6237		RS1/8S182J
	R6209		RS1/8S221J
	R6239		RS1/8S332J
	R6101		RS1/8S470J
	VR6201 (10KΩ)		ACP1056
	VR6202	VRTB6VS223	
	Other Resistors		RS1/10S□□□J
OTHERS			
	BN6201	TERMIONAL 4-P	AKE7028
	CN6201	14P SOCKET	KP200IA14L
	X6201	CRYSTAL RESONATOR (456MHz)	ASS1066
	X6202	CERAMIC RESONATOR (450KHz)	ATF1027
	X6203	CRYSTAL RESONATOR (7,200MHz)	ASS1042
		AM RF TUNING BLOCK	AXX1025

P DIR RESET SW ASSY

SEMICONDUCTORS

	Q9998	DTC124EK
	Q9999	2SC2712
	D9998,D9999	1SS355

CAPACITORS

	C9999	CEV100M16

RESISTORS

	All Resistors	RS1/10S□□□J

6. ADJUSTMENT

6.1 TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98 Non modulation	80 or more	———	L6207	Adjust so that the DC voltage between the IC6201-Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mv.
2	Front End Sensitivity Adjustment	98	10 to 30	98MHz	L6102 T6101	Adjust so that the DC voltage between the IC6201-Pin 12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level.
3	Stereo Distortion	98	80	98MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
4	TUNED IND. Lighting Level	98	15±2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM → FM.*

■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level	999*1	47 (±2dB)	999kHz*1	VR6202	Adjust so that the indicator of TUNED IND. stars to light up.

**1: For the area using 10kHz step, frequencies should be 1000 kHz*

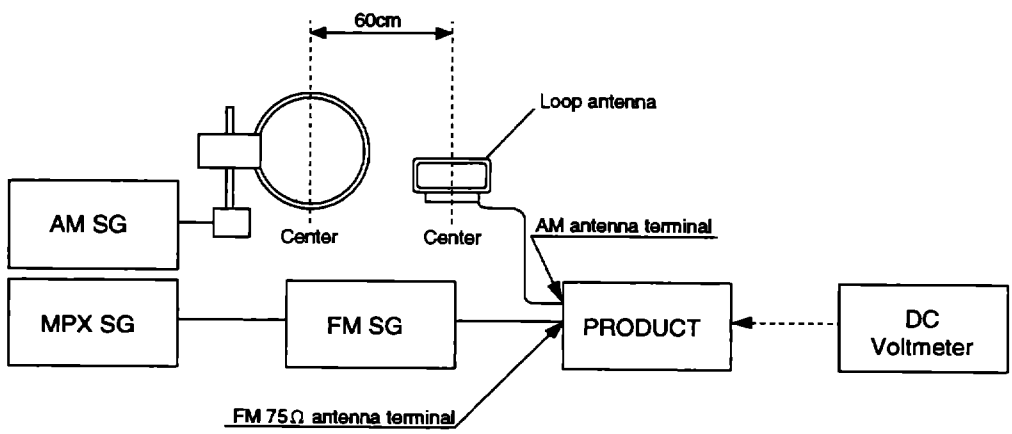


Fig. 1–1 AM and FM Adjustment Wiring Diagram

FM/AM TUNER MODULE

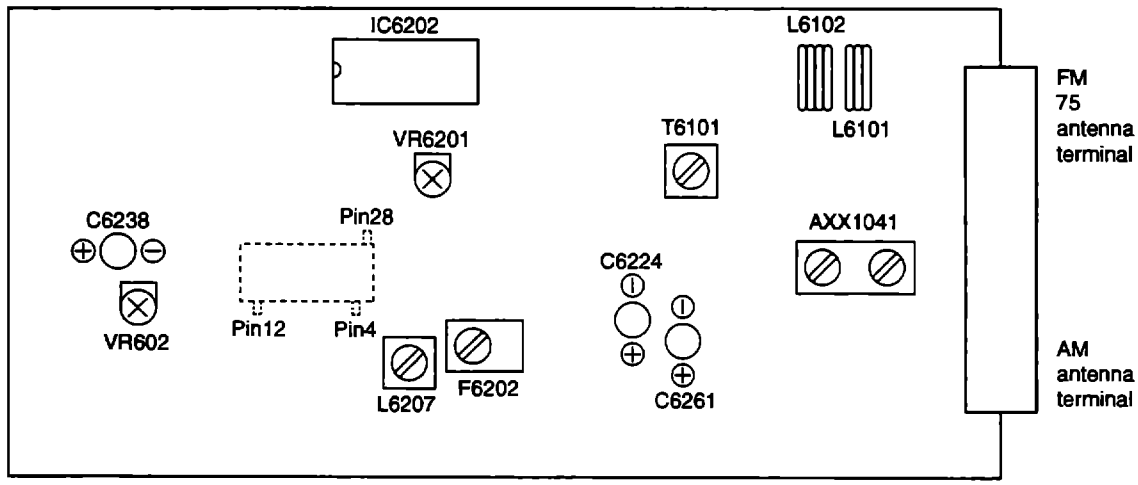


Fig. 1–2 Adjustment Points

7. GENERAL INFORMATION

7.1 PARTS

7.1.1 IC

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDG192A (FL/U-COM ASSY : IC901)

● Microcomputer Port Function Table

PIN No.	PIN NAME	FUNCTION	RESET		FUNCTION		
1	G1/A1	O/O	Hi-Z or PD	O	FL Grid 2		
2	G0/A0	O/O	Hi-Z or PD	O	FL Grid 1		
3	NC	(5V)			(5V)		
4	PE0/EC0/INT0	I/I/I	Hi-Z	I	AC WAKE-UP		
5	PE1/EC1/INT1	I/I/I	Hi-Z	I	no use		
6	PE2/INT2	I/I	Hi-Z	I	no use		
7	PE3/INT3/NMI	I/I/I	Hi-Z	I	AC-3 REQ.		
8	PE4/RMC	I/I	Hi-Z	I	RMC		
9	PE5	I/I	Hi-Z	I	9K/10K		
10	PE6/PWM	O/O	H	O	VOL.UP		
11	PE7/T0/ADJ	O/O/O	H	O	VOL.DOWN		
12	PC0/KR0	IO/I	Hi-Z	I	TUNED		
13	PC1/KR1	IO/I	Hi-Z	I	STEREO		
14	PC2/KR2	IO/I	Hi-Z	I	JOG 1		
15	PC3/KR3	IO/I	Hi-Z	I	JOG 2		
16	PC4/KR4	IO/I	Hi-Z	I	KEY IN 1		
17	PC5/KR5	IO/I	Hi-Z	I	KEY IN 2		
18	PC6/KR6	IO/I	Hi-Z	I	KEY IN 3		
19	PC7/KR7	IO/I	Hi-Z	I	DEM.LOCK		
20	PB0/CINT	IO/I	Hi-Z	I	DIR. LOCK		
21	PB1/CS0	IO/I	Hi-Z	O	AC-3 RST		
22	PB2/SCK0	IO/IO	Hi-Z	O	AC-3 CK		
23	PB3/SI0	IO/I	Hi-Z	I	AC-3 OUT		
24	PB4/SO0	IO/I	Hi-Z	O	AC-3 DT		
25	PB5/SCK1	IO/IO	Hi-Z	O	AC-3 CS		
26	PB6/SI1	IO/I	Hi-Z	O	AD/DIR		
27	PB7/SO1	IO/O	Hi-Z	O	AC-3 STOP		
28	AVREF	I	(5V)	I	5V		
29	PA0/AN0	IO/AI	Hi-Z	I	KU-HY SELECTION		
30	PA1/AN1	IO/AI	Hi-Z	O	BAND		
31	PA2/AN2	IO/AI	Hi-Z	O	no use		
32	PA3/AN3	IO/AI	Hi-Z	I	DSP OL		
33	PA4/AN4	IO/AI	Hi-Z	I	AMP OL		
34	PA5/AN5	IO/AI	Hi-Z	I	AMP DC		
35	PA6/AN6	IO/AI	Hi-Z	O	V.CONT B		
36	PA7/AN7	IO/AI	Hi-Z	O	V.CONT A		
37	AVSS	(GND)	GND		GND		
38	RST	I	LOW	I	RST		
39	EXTAL	I	OSCILLATION	I	OSCILLATION		
40	XTAL	O	OSCILLATION	O	OSCILLATION		
41	VSS	(GND)	GND		GND		
42	TX	O		O	OPEN		
43	TEX	I		I	GND		
44	VDD	(5V)	5V		5V		
45	VFDP	(VF)	VF		VF		
46	PD0/A55	O/O	Hi-Z or PD	O	V.MUTE		
47	PD1/A54	O/O	Hi-Z or PD	O	AC RY		
48	PD2/A53	O/O	Hi-Z or PD	O	R.C. RY		
49	PD3/A52	O/O	Hi-Z or PD	O	FRONT RY		
50	PD4/A51	O/O	Hi-Z or PD	O	SP-B RY		

PIN No.	PIN NAME	FUNCTION	RESET		FUNCTION		
51	PD5/A50	O/O	Hi-Z or PD	O	HP RY		
52	PD6/A49	O/O	Hi-Z or PD	O	SP-A RY		
53	PD7/A48	O/O	Hi-Z or PD	O	no use		
54	PF0/A47	O/O	Hi-Z or PD	O	no use		
55	PF1/A46	O/O	Hi-Z or PD	O	no use		
56	PF2/A45	O/O	Hi-Z or PD	O	(OPEN)		
57	PF3/A44	O/O	Hi-Z or PD	O	(OPEN)		
58	PF4/A43	O/O	Hi-Z or PD	O	F. ST 3		
59	PF5/A42	O/O	Hi-Z or PD	O	F. ST 2		
60	PF6/A41	O/O	Hi-Z or PD	O	F. ST 1		
61	PF7/A40	O/O	Hi-Z or PD	O	SYS. DT		
62	PG0/A39	O/O	Hi-Z or PD	O	SYS. CK		
63	PG1/A38	O/O	Hi-Z or PD	O	PLL CE		
64	PG2/A37	O/O	Hi-Z or PD	O	T. MUTE		
65	PG3/A36	O/O	Hi-Z or PD	O	A. MUTE		
66	PG4/A35	O/O	Hi-Z or PD	O	MONO		
67	PG5/A34	O/O	Hi-Z or PD	O	LOUDNESS		
68	PG6/A33	O/O	Hi-Z or PD	O	(OPEN)		
69	PG7/A32	O/O	Hi-Z or PD	O	SEG.21		
70	PH0/A31	O/O	Hi-Z or PD	O	SEG.20		
71	PH1/A30	O/O	Hi-Z or PD	O	SEG.19		
72	PH2/A29	O/O	Hi-Z or PD	O	SEG.18/KEY 1		
73	PH3/A28	O/O	Hi-Z or PD	O	SEG.17/KEY 2		
74	PH4/A27	O/O	Hi-Z or PD	O	SEG.16/KEY 3		
75	PH5/A26	O/O	Hi-Z or PD	O	SEG.15/KEY 4		
76	PH6/A25	O/O	Hi-Z or PD	O	SEG.14/KEY 5		
77	PH7/A24	O/O	Hi-Z or PD	O	SEG.13/KEY 6		
78	A23	O	Hi-Z or PD	O	SEG.12/KEY 7		
79	A22	O	Hi-Z or PD	O	SEG.11/KEY 8		
80	A21	O	Hi-Z or PD	O	SEG.10/KEY 9		
81	A20	O	Hi-Z or PD	O	SEG. 9/KEY10		
82	A19	O	Hi-Z or PD	O	SEG. 8		
83	A18	O	Hi-Z or PD	O	SEG. 7		
84	A17	O	Hi-Z or PD	O	SEG. 6		
85	A16	O	Hi-Z or PD	O	SEG. 5		
86	G15/A15	O/O	Hi-Z or PD	O	SEG. 4		
87	G14/A14	O/O	Hi-Z or PD	O	SEG. 3		
88	G13/A13	O/O	Hi-Z or PD	O	SEG. 2		
89	V_{DD}	5V	5V		5V		
90	G12/A12	O/O	Hi-Z or PD	O	SEG. 1		
91	G11/A11	O/O	Hi-Z or PD	O	FL Grid12		
92	G10/A10	O/O	Hi-Z or PD	O	FL Grid11		
93	G9/A9	O/O	Hi-Z or PD	O	FL Grid10		
94	G8/A8	O/O	Hi-Z or PD	O	FL Grid 9		
95	G7/A7	O/O	Hi-Z or PD	O	FL Grid 8		
96	G6/A6	O/O	Hi-Z or PD	O	FL Grid 7		
97	G5/A5	O/O	Hi-Z or PD	O	FL Grid 6		
98	G4/A4	O/O	Hi-Z or PD	O	FL Grid 5		
99	G3/A3	O/O	Hi-Z or PD	O	FL Grid 4		
100	G2/A2	O/O	Hi-Z or PD	O	FL Grid 3		

Pin No.	Port Function	Logic	Function
4	AC WAKE UP input	50 or 60 Hz square wave	Same as the conventional model. Normal operation mode when signals are input. When signals are absent and 2 waves are dropped, the "STOP mode" should be set. Note) To prevent incorrect operations due to noise and static electricity, implement noise removal measures.
8	SR remote controller input	SR remote controller code (no carrier, Hi active).	The output of the light-receiving section of the remote controller of the unit and output from SR IN of the light-receiving section of the remote controller of other unit are input.
9	Freq. step select input (9K/10K)	H/L	Selects frequency steps of the tuner. FM AM H 100K 10K L 50K 9K
10	VOL.UP output	Lo active	Motor volume control. Defined as Lo when VOL.UP.
11	VOL.DOWN output	Lo active	Motor volume control. Defined as Lo when VOL.DOWN.
12	TUNED input	Hi active	Lo is input when the tuner is being tuned. "TUNED" lights up in the FL display. Functions only during TUNER FUNCTION and normally does not function.
13	STEREO input	Hi active	Lo is input when the tuner receives a stereo broadcasting. "STEREO" lights up on the FL display. Does not function when the forcible monaural is ON. Functions only during TUNER FUNCTION and normally does not function.
14	JOG 1 input	Pulse Lo input Normally H	JOG counterclockwise direction input. The input sensitivity is the same as the conventional model. (1 click, 1 step?)
15	JOG 2 input	Pulse Lo input Normally H	JOG clockwise direction input. The input sensitivity is the same as the conventional model. (1 click, 1 step?)
16-18	KEY SCAN input		KEY SCAN input of the unit key.
29	Destination select	H/L	H:/KU series model (including /SD) L:/HY series model (including /HL, YP)
32	DSP input level sensitivity	Analog input	0 to 5V input level is input to DSP. When the input level exceeds 2.1V, (ATT)"OVERLOAD" lights up on the FL display. Functions only when analog signals (including AUTO) are input to the DSP. Does not function when the front speaker is set to "LARGE" or in a 2ch playback (including DIRECT). When the front speaker is set to "SMALL", this port functions in 2ch playback (including DIRECT). AC-3 model only.
33	OL.DETECT input	Lo active	Input of the protection circuit as OVERLOAD DETECTOR. When Lo is input, this port opens relays other than the AC relay. "OVERLOAD" flashes on the 8th digits of the FL display for five seconds.

Pin No.	Port Function	Logic	Function
34	DC.DETECT input	Lo active	Input of the protection circuit as DC DETECTOR. When Lo is input, this port opens relays other than the AC relay. "POWEROFF" flashes on the 8th digits of the FL display.
35, 36	VIDEO IC CONT. output	H/L Depending on LA7952	2-bit parallel control for the video function IC. Refer to SW specification.
38	RESET	Lo active	Same specification as VSX-605S
39 40	Oscillation input Oscillation output		7.7MHz (ASS1055)
46	VIDEO signal MUTE output	Lo active	Output for muting MOTOR OUT Becomes H when in the audio FUNCTION.
30	RDS decoder VDD ON/OFF and FM/AM selection	H active	Turns ON/OFF the RDS decoder Tr switch for VDD. Lo when in AM and Hi in FM of the function tuner. Lo when the power is OFF. H at other times even when functions other than TUNER are set.
58	TC9299 ST output	Depending on TC9299	Serial control STROBE for the electric volume (for REAR, CENT., SUB WF) TC9299 (x2). 3 lines of 58, 61, and 62 (AC-3 model only).
59	TC9162 ST output	Depending on TC9162	Serial control STROBE for the function IC TC9162. 3 lines of 59, 61, and 62 (AC-3 model only).
60	TC9273 ST output	Depending on TC9273	Serial control STROBE for the function IC TC9273. 3 lines of 60, 61, and 62.
61	SYS.DATA output	Depending on TC9273, TC9162, TC9299, and LM7001	Controls PLL IC, AUDIO FUNC. IC, E.VOL. IC with a serial control data. (TC9162 and TC9299 are only for AC-3 model)
62	SYS.CK output	Depending on TC9273, TC9162, TC9299, and LM7001	Controls PLL IC, AUDIO FUNC. IC, E.VOL. IC with a serial control clock. (TC9162 and TC9299 are only for AC-3 model)
63	PLL CE. output	Depending on LM7001	CHIP ENABLE for the tuner PLL IC serial control. 3 lines of 61, 62, and 63
64	T.MUTE ON/OFF output	H active	Muting control for the tuner output. Muting timing is the same as the conventional model. Set to H in functions other than TUNER.
66	TUNER forcible monaural ON/OFF output	H active	Set to H when the forcible monaural is ON in the MPX mode of the TUNER function.
51	HP.RY ON/OFF output	H active	Turns ON/OFF the Tr switch for the headphone RY.
52 50 49	SP-A RY SP-B RY FRONT RY ON/OFF output	H active	Turns ON/OFF the Tr switch for the front SP to be connected in series. Logic is as follows. 52 50 49 SP-A ON H Lo H SP-B ON Lo H H A,B ON Lo Lo H A,B OFF Hi Hi Lo

Pin No.	Port Function	Logic	Function
48	R.C. RY ON/OFF output	H active	Turns ON/OFF the Tr switch for the rear, center SP RY.
48-52	Protect operation		RY for protection is not provided for this model. The following functions are performed by setting ports 58 to 62 to Lo. Muting when power ON Instantaneous shut-off when power OFF AMP DC protect AMP over loading protect
47	AC RY ON/OFF output	H active	Turns ON/OFF the Tr switch for AC power RY. Lo when stand by, H when power ON.
65	A.MUTE output	Lo active	Controls the audio system muting. Muting timing is the same as the conventional model.
67	LOUDNESS ON/OFF output	H active	Turns ON/OFF the Tr switch for LOUDNESS. "LOUDNESS" lights up on the FL display when ON. Forcibly turned OFF when DIRECT ON.
69-90 (excluding 89)	FL drive segment output Also serves as 72 to 81 KEY SCAN	Lo active	FL driver Main unit KEY SCAN output 81 is dedicated for selecting a destination.
1,2 & 91-100	FL drive grid output	Lo active	FL driver (91 is for AC-3 model only)
7	AC-3 REQ input	Lo active	Communication request from DSP IC to the main body microcomputer.
19	DEM.LOCK input	Lo active	Lo is input when the demodulator IC is locked with the AC-3 RF signal. For models not equipped with a demodulator, the port serves as an output port.
20	DIR LOCK input	Lo active	Lo is input when the DIR is locked with the digital input signal.
21	AC-3 RST output	Lo active	Resets DSP.
22	AC-3 CK output		DSP serial control clock output. Refer to the timing chart.
23	AC-3 OUT output		Data from DSP to the microcomputer. Refer to the timing chart.
24	AC-3 DT output		Outputs the DSP serial control data. Refer to the timing chart.
25	AC-3 CS output	Lo active	Outputs a chip select of the DSP serial control. Refer to the timing chart.
26	AD/DIR	H/L	DSP MASTER/SLAVE select output. When analog signal is input:MASTER should be Lo. When the digital and RF signals are input:SLAVE should be H.
27	AC-3 STOP output	H active	Stops the DSP crystal oscillation and internal PLL oscillation. Set to H only when 2ch STEREO (including DIRECT) with the front speaker is set to "LARGE". Set to Lo when others.

■ PM4007A (DOLBY DIGITAL ASSY : IC9071)

● Pin Function

Pin No.	Pin Name	I/O	Description	Pin No.	Pin Name	I/O	Description
1	GND	–	—	31	A7	O	FOOIN
2	VDD	–	—	32	GND	–	—
3	RESET	I	FDS2H	33	VDD	–	—
4	OSCON	I	FDS2H	34	A12	O	FOOIN
5	DATA	I	FDS2H	35	A14	O	FOOIN
6	MCK	I	FDS2H	36	WEB	O	FOO1
7	MLTB	I	FDS2H	37	A13	O	FOOIN
8	IDST	O	FOOI	38	A8	O	FOOIN
9	IDCK	O	FOOI	39	A9	O	FOOIN
10	IDO	O	FOOI	40	GND	–	—
11	TMO	I	FIDI	41	A11	O	FOOIN
12	ECCK	O	FIDI	42	OEB	O	FOOI
13	DEN	O	FIDI	43	A10	O	FOOIN
14	DRY	O	FIDI	44	DB7	B	BOW4
15	MSYC	O	FIDI	45	DB6	B	BOW4
16	TM1	I	FIDI	46	DB5	B	BOW4
17	A0	O	FOOIN	47	DB4	B	BOW4
18	A1	O	FOOIN	48	DB3	B	BOW4
19	A2	O	FOOIN	49	DB2	B	BOW4
20	A3	O	FOOIN	50	DB1	B	BOW4
21	A4	O	FOOIN	51	DB0	B	BOW4
22	A5	O	FOOIN	52	VDD	–	—
23	TM2	I	FIDI	53	GND	–	—
24	TM3	I	FIDI	54	T11	I	FIDIN
25	XOUT	O	OSB6	55	VIN	I	OSB6
26	XIN	I	OSB6	56	VOUT	O	OSB6
27	XEXT	I	FIDI	57	T12	I	FIDIN
28	GND	–	—	58	T13	I	FIDIN
29	VDD	–	—	59	TLDB	I	FIDIN
30	A6	O	FOOIN	60	TCK	I	FIDIN

Pin No.	Pin Name	I/O	Description	Pin No.	Pin Name	I/O	Description
61	TRP	O	FOOI	81	AVDD	O	AVDD *1
62	TD0	O	FOOI	82	CPIN	O	VIN *1
63	PD0	O	BOO8	83	CMIN	O	VII *1
64	T14	I	FIDIN	84	AGND	O	AGND *1
65	PDDIS	I	FIDIN	85	TM4	O	FIDI
66	MUTO	O	FOOI	86	VDD	O	—
67	T15	I	FIDIN	87	DIN	O	FIDIH
68	VLDY	O	FOOI	88	DOUT	O	FOOI
69	DASYO	O	FOOI	89	DOUTB	–	FOOI
70	DAOUT	O	FOOI	90	C9M	O	FOOIN
71	T16	I	FIDIN	91	GND	O	—
72	T17	I	FIDIN	92	WINGT	O	FOOI
73	T18	I	FIDIN	93	SYST0	O	FOOI
74	C2F1	O	FOOI	94	SYST1	O	FOOI
75	C2F0	O	FOOI	95	ADST0	O	FOOI
76	C1F1	O	FOOI	96	ADST1	O	FOOI
77	C1F0	O	FOOI	97	TM5	O	FIDI
78	MUTI	I	FIDIN	98	BUNR1	O	FIDI
79	VDD	–	—	99	AGND	O	AGND *2
80	GND	–	—	100	AVDD	O	AVDD *2

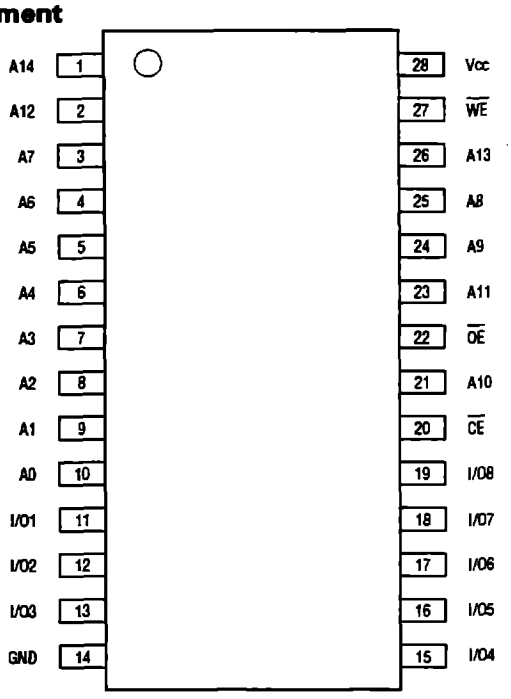
*1: Connected to a high-speed comparator (AACP25NA).

*2: Connected to a PLL macro (AAPLLMFC).

■ LH52256AN-70LL (DOLBY DIGITAL ASSY : IC9091)

● Pin Arrangement

(Top View)



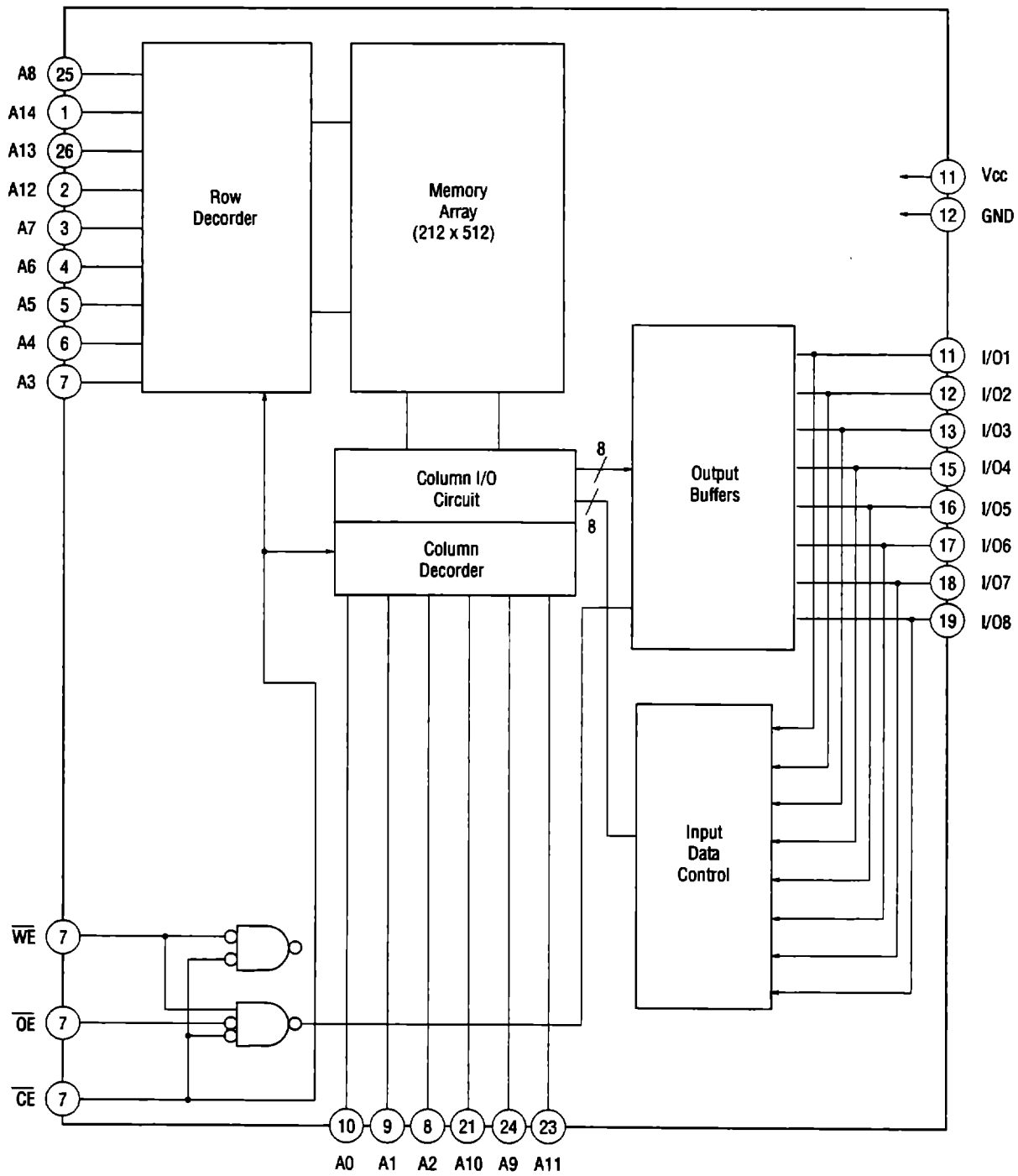
● Pin Function

Pin Name	Function
A0 to A14	Address Inputs
WE	Write Enable Input
CS	Chip Select
OE	Output Enable Lnput
I/O1 to I/O8	Data input/Output
Vcc	Power
Vss	Groud

● Operation Mode

$\overline{CE}$	$\overline{WE}$	$\overline{OE}$	Mode	I/O1 to I/O8	Power supply current
H	*	*	Standby	High impedance	Standby(I_{SB})
L	L	*	Write	Data input	Operation(I_{CC})
L	H	L	Read	Data output	Operation(I_{CC})
L	H	H	Output disable	High impedance	Operation(I_{CC})

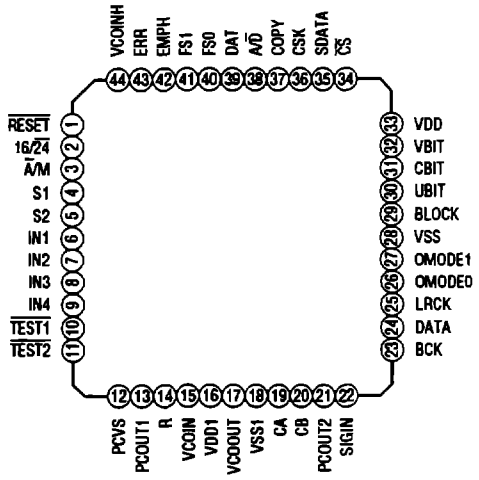
● Block Diagram



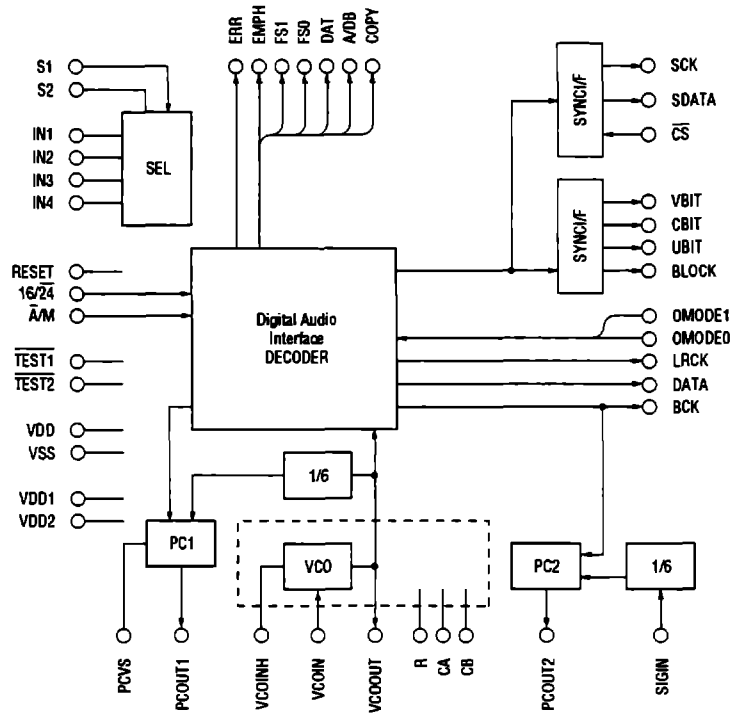
■ CD0004AF (DOLBY DIGITAL ASSY : IC9121)

● Pin Arrangement

(Top View)



● Block Diagram



● Pin Function

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{RESET}}$	IS	Power ON reset input. "L":Reset.
2	16/$\overline{24}$	IT	Input format selection. With pull-up resister.
3	$\overline{\text{A}}$/M	IT	Input format selection. With pull-up resister.
4	S1	IT	Input selection 1
5	S2	IT	Input selection 2
6	IN1	IT	Data input 1
7	IN2	IT	Data input 2
8	IN3	IT	Data input 3
9	IN4	IT	Data input 4
10	$\overline{\text{TEST1}}$	IT	Test pin 1. Normally "H" or open. With pull-up resister.
11	$\overline{\text{TEST2}}$	IT	Test pin 2. Normally "H" or open. With pull-up resister.
12	PCVS	–	VCO free-running frequency setting input
13	PCOUT1	–	Phase comparator output 1
14	R	–	Connected to the VCO adjusting resistor.
15	VCOIN	–	VCO control voltage input
16	VDD1	–	VCO power supply
17	VCOOUT	–	VCO output (384 fs)
18	VSS1	–	VCO GND
19	CA	–	VCO adjusting capacity connection
20	CB	–	VCO adjusting capacity connection
21	PCOUT2	–	Phase comparator output 2
22	SIGIN	IT	External VCO input

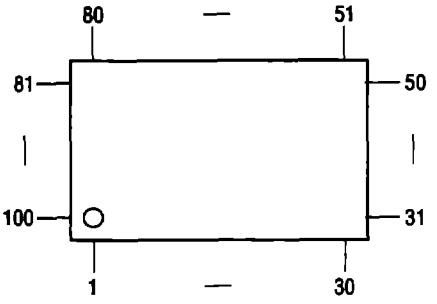
Pin No.	Pin Name	I/O	Description
23	BCK	O	Demodulation data bit clock output (64 fs)
24	DATA	O	Demodulation audio data output
25	LRCK	O	Demodulation data LR clock output. "H":L channel.
26	OMODE0	O	Data output format selection 0.
27	OMODE1	O	Data output format selection 1.
28	VSS	–	Logic GND
29	BLOCK	O	Block start output
30	UBIT	O	User data output
31	CBIT	O	Channel status output
32	VBIT	O	Validity output
33	VDD	–	Logic power supply
34	$\overline{CS}$	IT	Chip select input. "L":Selected.
35	SDATA	OT	Serial data output
36	SCK	IT	Serial clock input
37	COPY	O	Copy prohibition information output
38	A/$\overline{D}$	O	Audio/digital data information output
39	DAT	O	DAT information output
40	FS0	O	Sampling frequency information output 0
41	FS1	O	Sampling frequency information output 1
42	EMPH	O	Emphasis information output
43	$\overline{ERR}$	O	Data reading error output. "H":Error occurred.
44	VCOINH	IT	Internal VCO oscillation stop input. "H":Stops.

IS : Schmidt level input
IT : TTL level input
O : CMOS level output
OT : CMOS level tri-state output

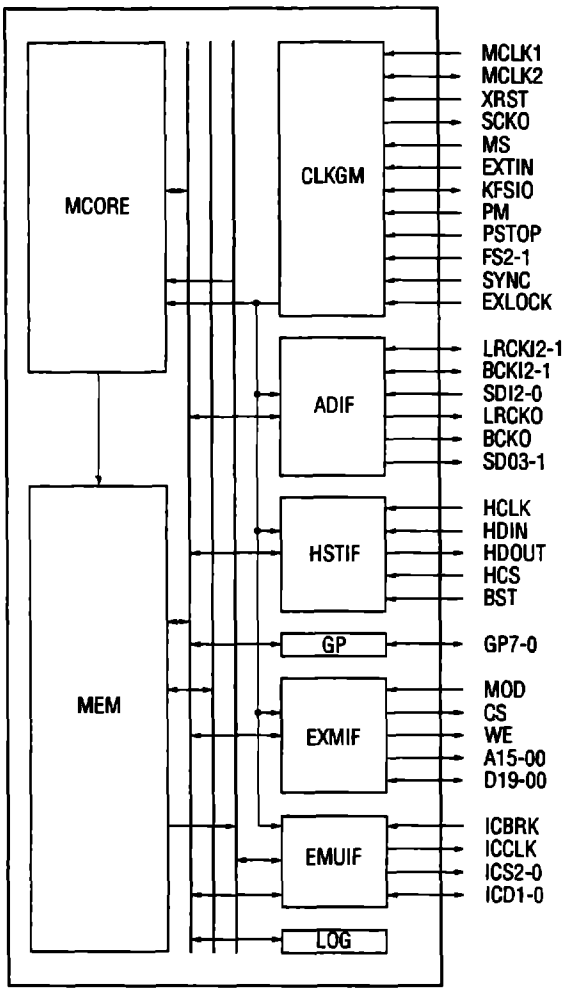
■ MB86342A (DOLBY DIGITAL ASSY : IC9301)

● Pin Arrangement

(Top View)



● Block Diagram



● Pin Function

No.	Pin Name	I/O	Description
1	XRST	I	DSP reset signal input
2	EXTIN	I	System clock signal input (384 fs)
3	VDD	Power	—
4	VSS	GND	—
5	MCLK1	I	DSP core clock oscillation input
6	MCLK2	I/O	DSP core clock oscillation input/output
7	KFSIO	I/O	Audio system clock input/output (384 fs)
8	SCKO	O	DSP core system clock signal output
9	PM	I	Test pin (Normally, clipped to GND.)
10	PSTOP	I	PLL internal oscillation and crystal oscillation termination setting signal input
11	EXLOCK	I	EXTIN lock signal input
12	MS	I	MUCAP master/slave operation switching signal input
13	FS1	I	Sampling frequency switching
14	FS2	I	
15	VSS	GND	—

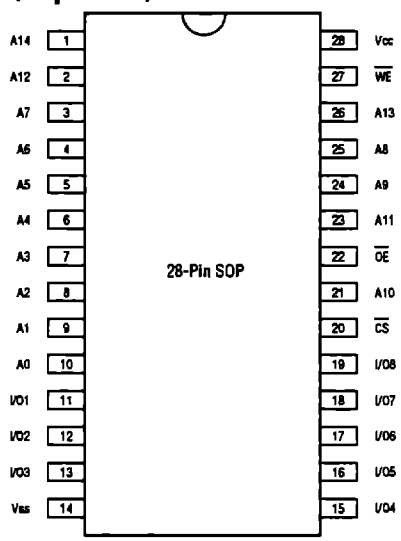
No.	Pin Name	I/O	Description
16	SYNC	I	MUCAP sync/async operation switching signal input
17	LRCKI1	I/O	Serial data input rate clock signal input/output for the audio interface
18	BCKI1	I/O	Serial data input clock signal input/output for the audio interface
19	SDI1	I	Serial data signal input for the audio interface
20	LRCKI2	I	Serial data input rate clock signal input for the audio interface
21	BCKI2	I	Serial data input clock signal for the audio interface
22	SDI2	I	Serial data signal input for the audio interface
23	LRCK0	O	Serial data output clock signal output for the audio interface
24	BCK0	O	Serial data output rate clock signal output for the audio interface
25	SDO1	O	Serial data signal output for the audio interface
26	SDO2	O	
27	SDO3	O	
28	VDD	Power	—
29	VSS	GND	—
30	GP7	I/O	8-bit general port data signal input/output
31	GP6	I/O	
32	GP5	I/O	
33	VDD	Power	—
34	VSS	GND	—
35	GP4	I/O	8-bit general port data signal input/output
36	GP3	I/O	
37	GP2	I/O	
38	GP1	I/O	
39	GP0	I/O	
40	VSS	GND	—
41	HCLK	I	Serial data signal input/output clock signal input/output for the host interface
42	HCS	I	Chip select signal input for the host interface
43	HDIN	I	Serial data signal input for the host interface
44	HDOUT	O	Serial data signal output for the host interface
45	BST	I	Bootstrap operation mode setting signal input
46	MOD	I	MUCAP bus mode operation setting signal input
47	CS	O	External SRAM interface chip select signal output
48	WE	O	External SRAM interface write enable signal output
49	A15	O	External SRAM interface address signal output
50	A14	O	
51	A13	O	
52	A12	O	
53	VDD	Power	—
54	VSS	GND	—
55	A11	O	External SRAM interface address signal output
56	A10	O	
57	A09	O	

No.	Pin Name	I/O	Description
58	A08	O	External SRAM interface address signal output
59	A07	O	
60	A06	O	
61	A05	O	
62	A04	O	
63	A03	O	
64	A02	O	
65	VSS	GND	—
66	A01	O	External SRAM interface address signal output
67	A00	O	
68	D19	I/O	External SRAM interface data signal input/output
69	D18	I/O	
70	D17	I/O	
71	D16	I/O	
72	D15	I/O	
73	D14	I/O	
74	D13	I/O	
75	D12	I/O	
76	D11	I/O	
77	D10	I/O	
78	VDD	Power	—
79	VSS	GND	—
80	D09	I/O	External SRAM interface data signal input/output
81	D08	I/O	
82	D07	I/O	
83	VDD	Power	—
84	VSS	GND	—
85	D06	I/O	External SRAM interface data signal input/output
86	D05	I/O	
87	D04	I/O	
88	D03	I/O	
89	D02	I/O	
90	VSS	GND	—
91	D01	I/O	External SRAM interface data signal input/output
92	D00	I/O	
93	ICCLK	O	Emulator clock signal output
94	ICBRK	I	Emulator external break signal input
95	ICD1	I/O	Emulator address/data signal input/output
96	ICD0	I/O	
97	ICS2	O	Emulator status signal output
98	ICS1	O	
99	ICS0	O	
100	VSS	GND	—

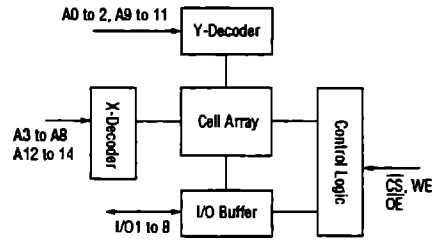
■ KM62V256CLG-7L (DOLBY DIGITAL ASSY : IC9361)

● Pin Arrangement

(Top View)



● Block Diagram



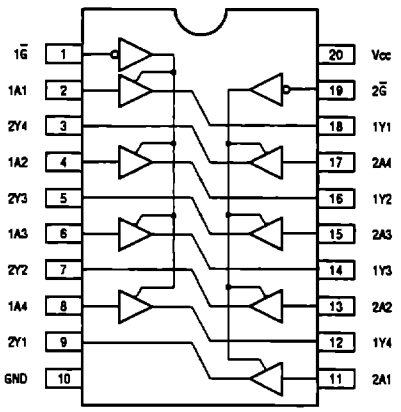
● Pin Function

Pin Name	Function
A0 to A14	Address Inputs
WE	Write Enable Input
CS	Chip Select
OE	Output Enable Lnput
I/O1 to I/O8	Data input/Output
Vcc	Power
Vss	Groud

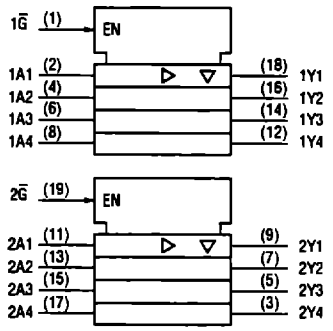
■ TC74HCT244AF (DOLBY DIGITAL ASSY : IC9371)

● Pin Arrangement

(Top View)



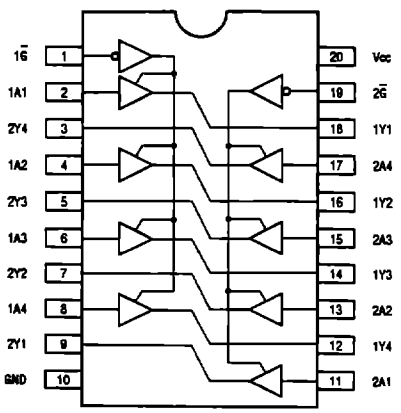
● Block Diagram



■ TC74LVX244FS (DOLBY DIGITAL ASSY : IC9381)

● Pin Arrangement

(Top View)



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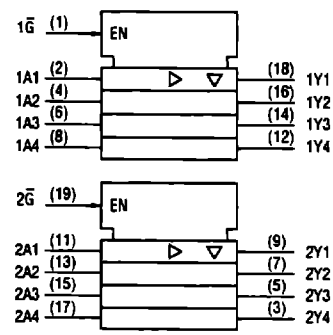
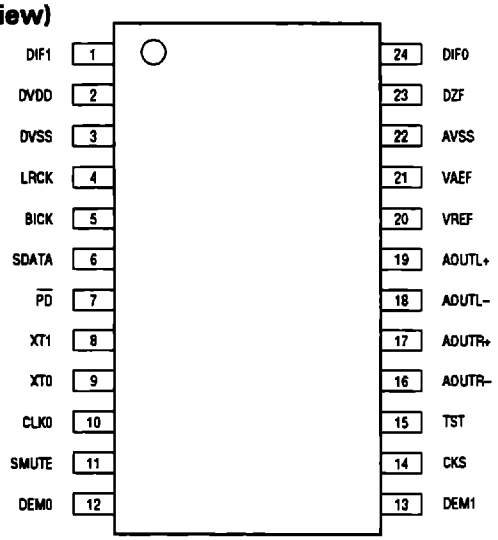


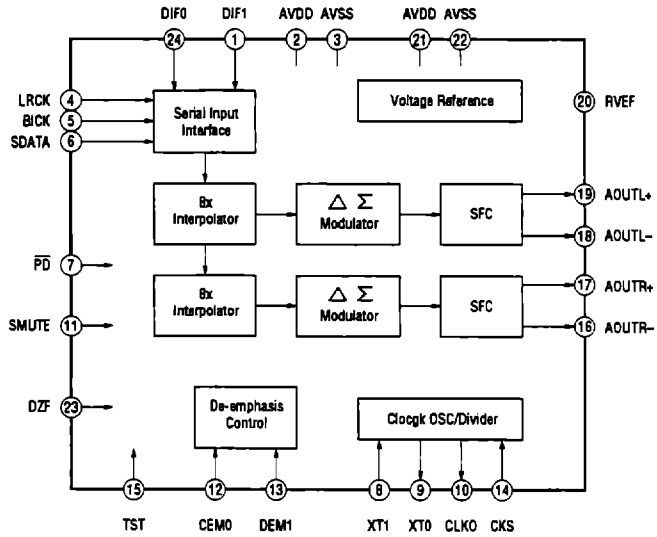
■ AK4319-VM (DOLBY DIGITAL ASSY : IC9401, IC9431, IC9461)

● Pin Arrangement

(Top View)



● Block Diagram

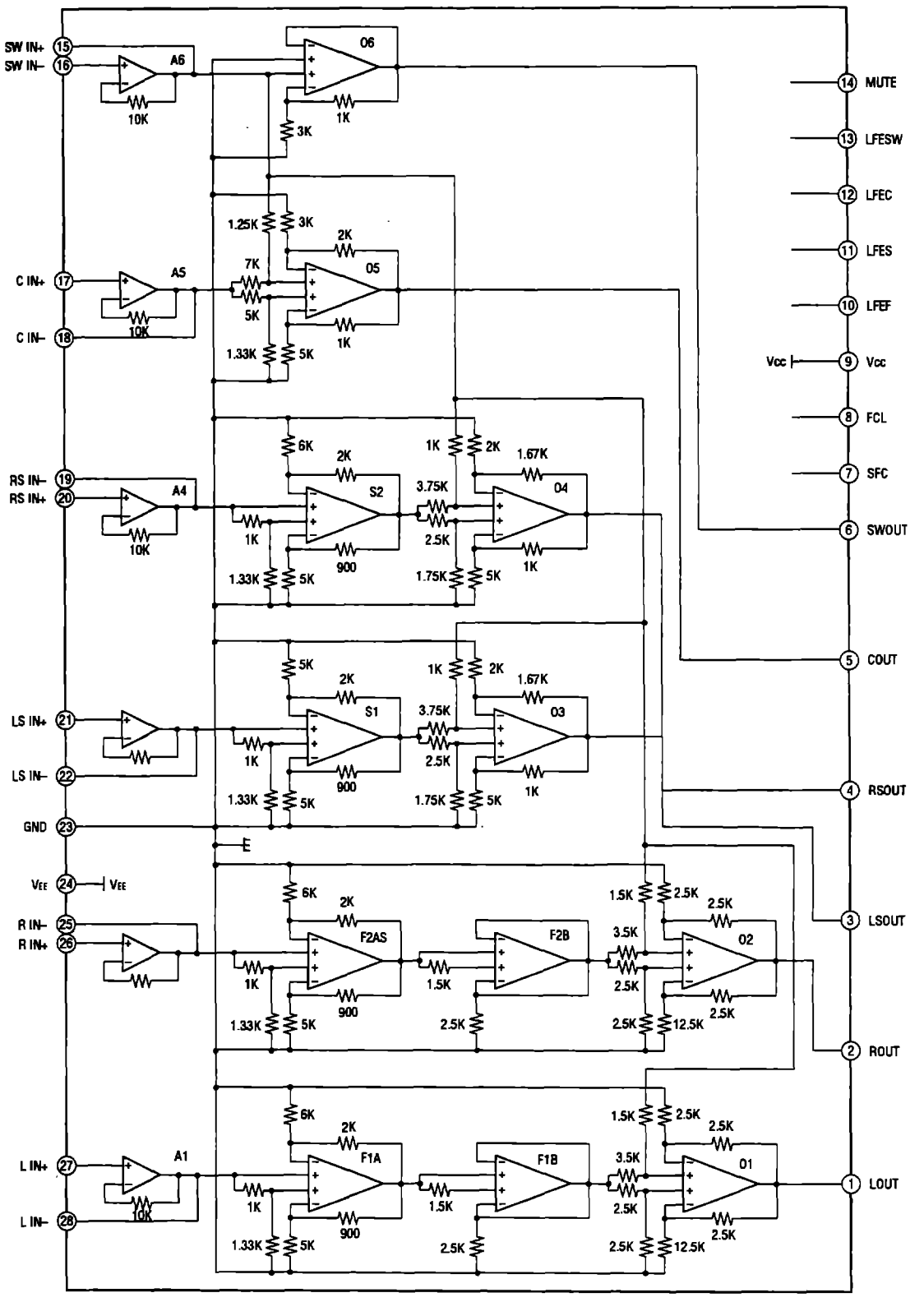


● Pin Function

Pin No.	Pin Name	I/O	Description
1	DIF1	I	Input format (pull-down pin). Compatible with 4 modes.
2	DVDD	–	Digital power supply, +5V
3	DVSS	–	Digital GND
4	LRCK	I	L/R clock. Determines the channel of serial data to be input.
5	BICK	I	Serial bit clock. Clock for latching the serial data.
6	SDATA	I	Serial data input pin. 2's compliment, MSB first.
7	PD	I	Reset pin. When this pin becomes "L", the filter and modulator are reset. When turning on the power, input "L" to reset.
8	XTI	I	Clock input. Connect a crystal oscillator between this pin and XT0 pin, or input an external CMOS clock to XT1. Clock frequencies can be selected with CKS pin.
9	XTO	I	Crystal oscillator output pin. When using a crystal oscillator, connect it to XT1. When using an external clock, does not use this pin.
10	CLKO	O	Oscillator clock output. Outputs XT1 clock with inverted.
11	SMUTE	O	Software muting pin (pull-down pin).When "H", a software muting starts. When "L", it is canceled.
12	DEMO	I	De-emphasize mode. Compatible with three frequencies.
13	DEM1	I	Clock select pin (pull-down pin). "L":CLK=256 fs, "H":CLK=384 fs.
14	CKS	I	Test pin (pull-down pin). Set to Open or "L".
15	TST	I	Rch analog negative output pin
16	AOUTR–	O	Rch analog positive output pin
17	AOUTR+	O	Lch analog negative output pin
18	AOUTR–	O	Lch analog positive output pin
19	AOUTR+	O	Reference voltage output pin, 2.95V (GND reference).
20	VREF	O	Connect a 10μF electrolytic capacitor and 0.1μF ceramic capacitor to AVSS.
21	AVDD	–	Analog power supply pin, +5V
22	AVSS	–	Analog GND
23	DZF	O	Zero input detection. Becomes "H" if no data is input to SDATA pin for 8192 times continuously for both channels.
24	DIF0	I	Input format (pull-down pin). Compatible with 4 modes.

■ PA4025A (DOLBY DIGITAL ASSY : IC9501)

● Block Diagram



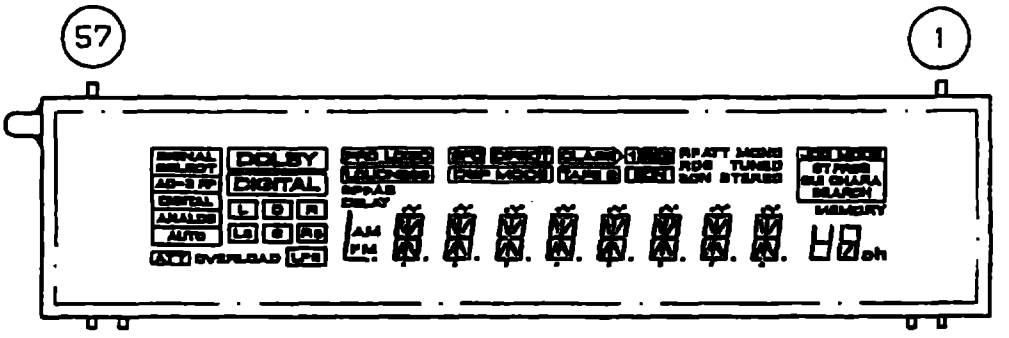
● Pin Function

Pin No.	Pin Name	Description	Pin No.	Pin Name	Description
1	LOUT	Lch output	15	GND	SWch (–) input
2	ROUT	Rch output	16	WINGT	SWch (+) input
3	LSOUT	LSch output	17	SYST0	Cch (+) input
4	RSOUT	RSch output	18	SYST1	Cch (–) input
5	COUT	Cch output	19	ADST0	RSch (–) input
6	SWOUT	SWch output	20	ADST1	RSch (+) input
7	SFC	Gain control (SFC) input	21	TM5	LSch (+) input
8	FCL	Gain control (FCL) input	22	BUNR1	LSch (–) input
9	VCC	VCC	23	AGND	GND
10	LFEF	Gain control (LFEF) input	24	AVDD	VEE
11	LFES	Gain control (LFES) input	25	R IN–	R ch (–) input
12	LFEC	Gain control (LFEC) input	26	R IN+	R ch (+) input
13	LFESW	Gain control (LFESW) input	27	L IN+	L ch (+) input
14	MUTE	Mute input	28	L IN–	L ch (–) input

7.1.2 DISPLAY

■ AAV7034 (V901 : FL/U-COM ASSY)

● **FL Tube**

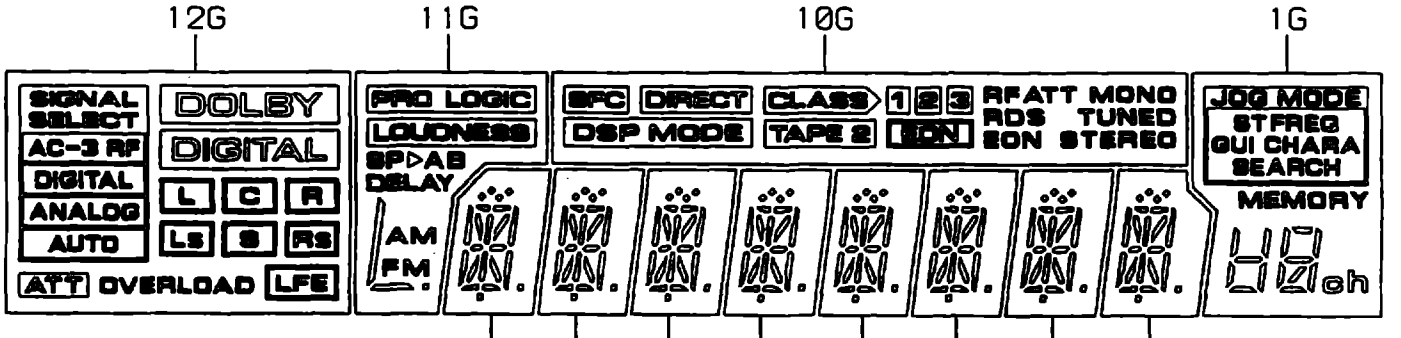


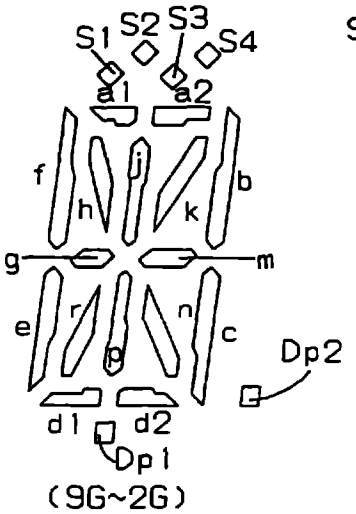
● **Pin Assignment**

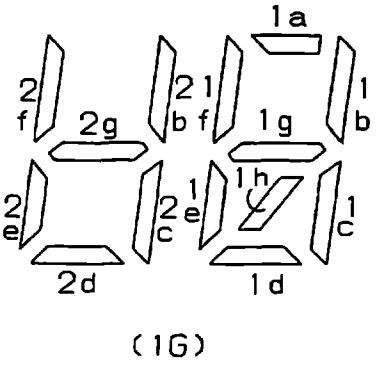
PIN NO.	57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
CONNECTION	F2 F1 NP NP NX NX NX NX NX NX NX NX NX NX NX NX NX NX NP 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 1G 2G 3G 4G 5G 6G 7G 8G 9G 10G 11G 12G NP NP F1 F2

NOTE 1) F1,F2 --- Filament
2) NP ------ No pin
3) NX ------ No extend pin
4) DL ------ Datum Line
5) 1G~12G --- Grid

● **Grid Assignment**





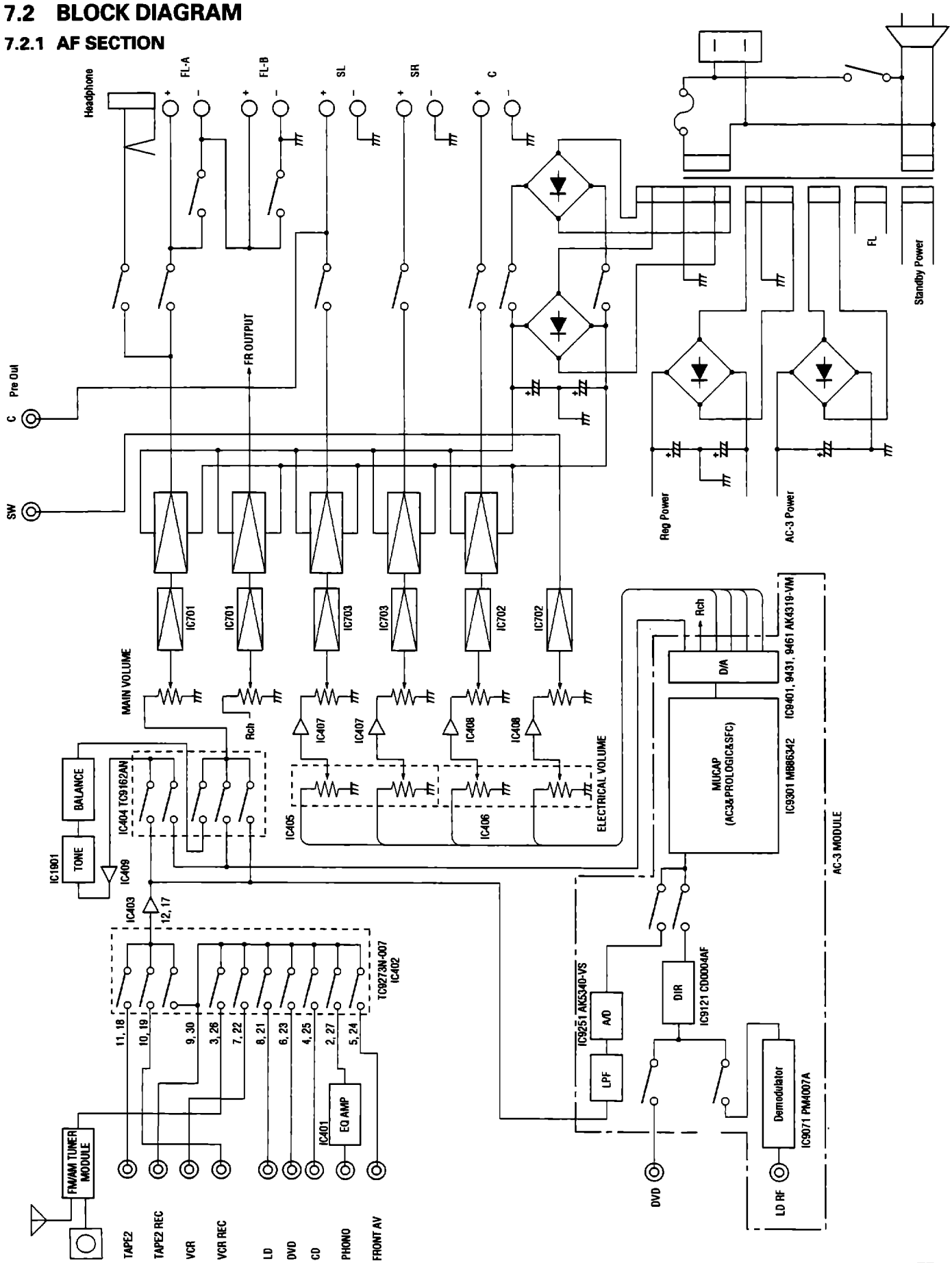


● **Anode Connection**

	12G	11G	10G	9G~2G	1G
P1	DOLBY		MONO	a1	2b,2c
P2	DIGITAL	▫	TUNED	a2	2g
P3	R	FM	STEREO	h	2d
P4	Ls Rs	AM	RFATT	j	2e
P5	(Ls) (Rs)	DELAY	RDS	k	2f
P6	LFE	B	EON	b	1a
P7	(LFE)	A	3	f	1b
P8	C	SP▷	2	m	1f
P9	(C)	LOUDNESS	1	g	1g
P10	S	PRO LOGIC	EON	c	1c
P11	L	-	CLASS	e	1h
P12	(L)	-	TAPE 2	r	1e
P13	OVERLOAD	-	DIRECT	p	1d
P14	SIGNAL SELECT	-	SFC	n	ch
P15	AC-3 RF	-	DSP MODE	d1	MEMORY
P16	DIGITAL	-	-	d2	SEARCH
P17	ANALOG	-	-	Dp1	CHARA
P18	AUTO	-	-	S1,S3	GUI
P19	ATT	-	-	S4	FREQ
P20	-	-	-	S2	ST
P21	-	-	-	Dp2	JOG MODE

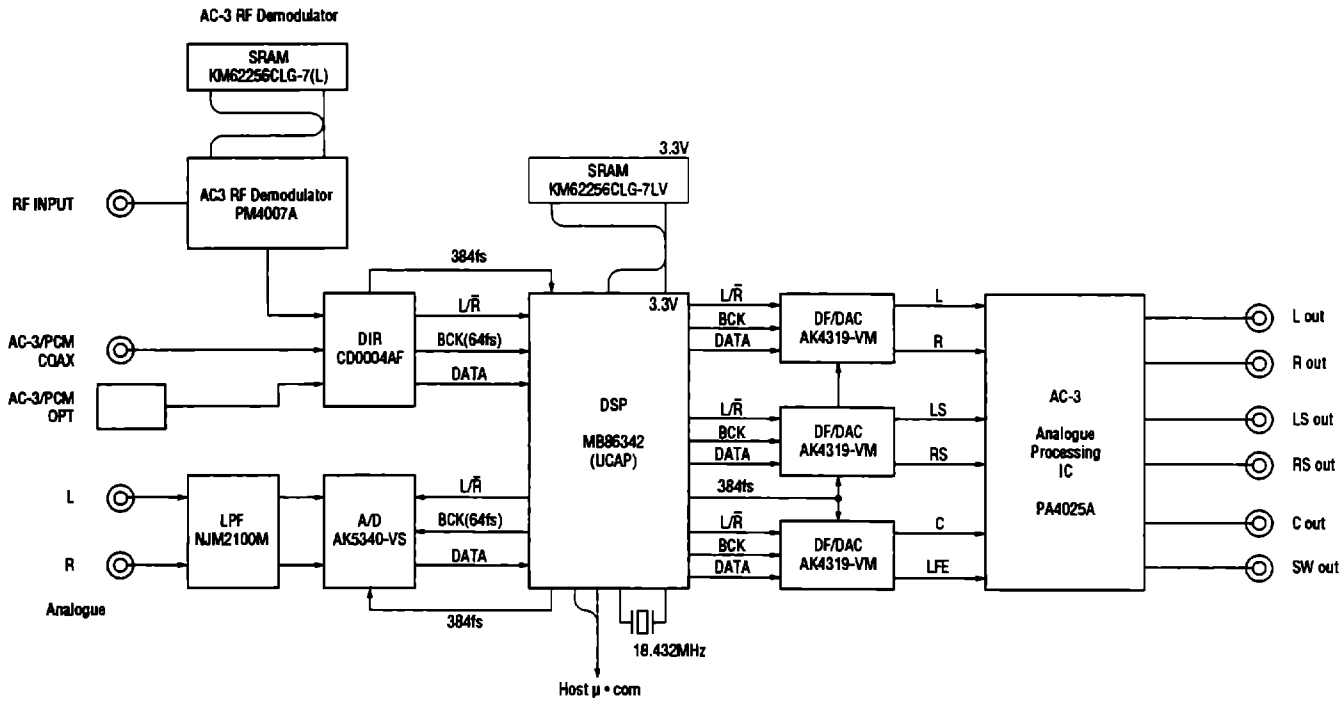
7.2 BLOCK DIAGRAM

7.2.1 AF SECTION

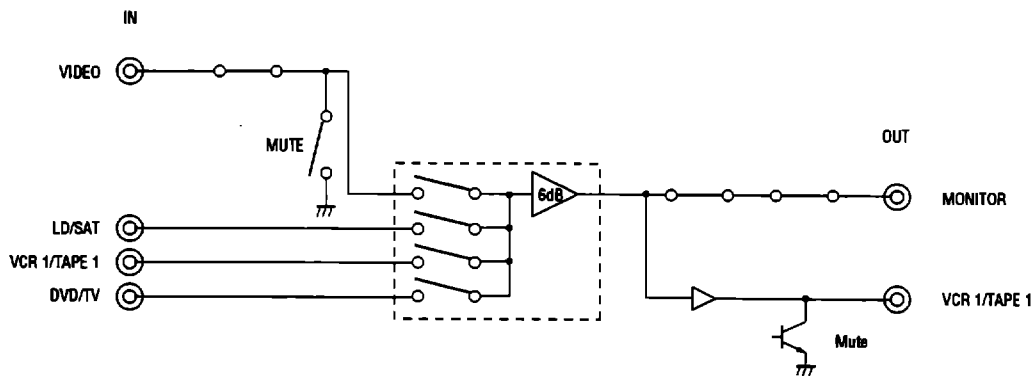


7.2.2 AC-3DECODE ASSY AND VIDEO COMPOSITE SECTION

● AC-3 DECODE ASSY



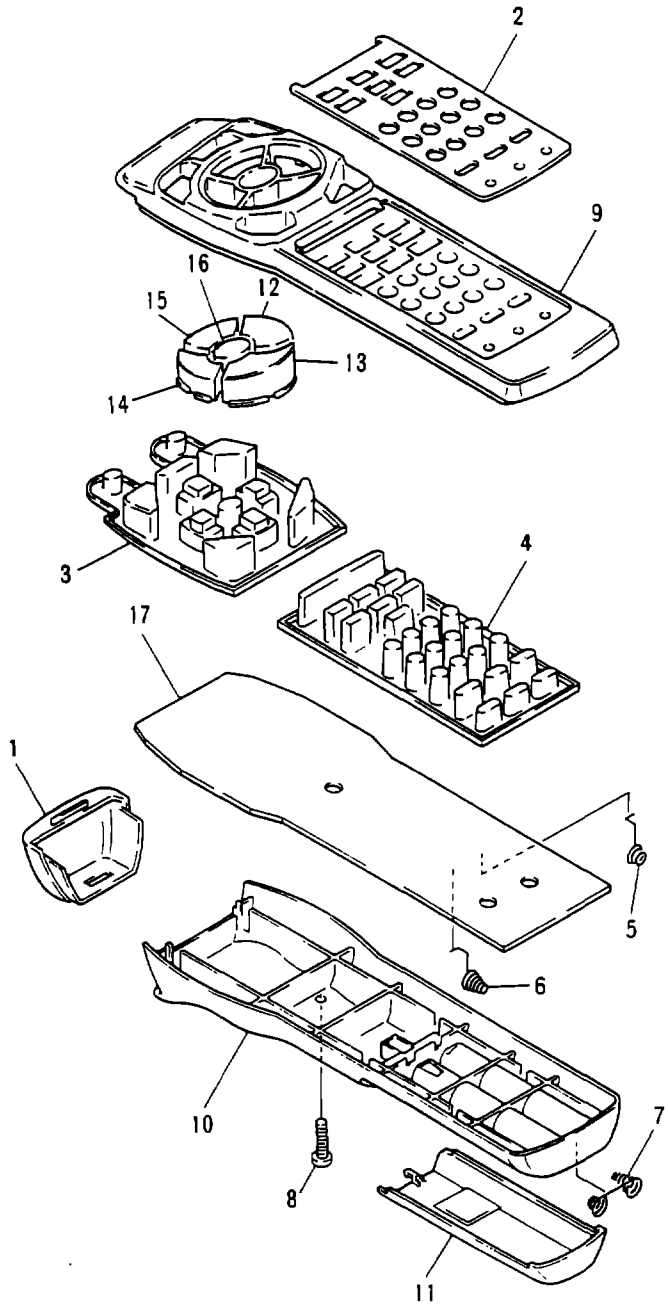
● VIDEO COMPOSITE SECTION



7.3 REMOTE CONTROL UNIT [CU-VSX116 (AXD7106)]

7.3.1 EXPLODED VIEWS AND PARTS LIST

NOTES: • *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
• *The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.*

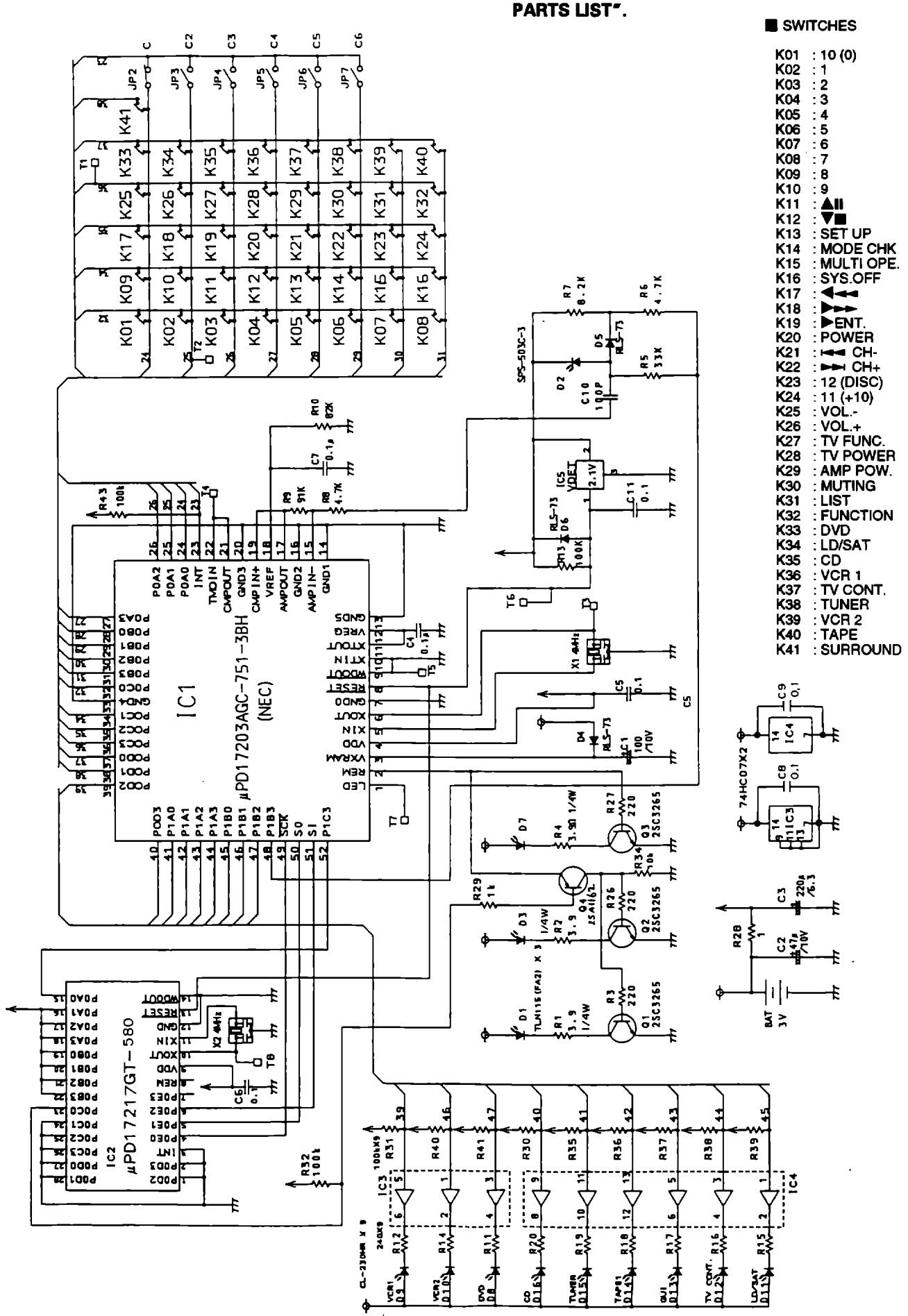


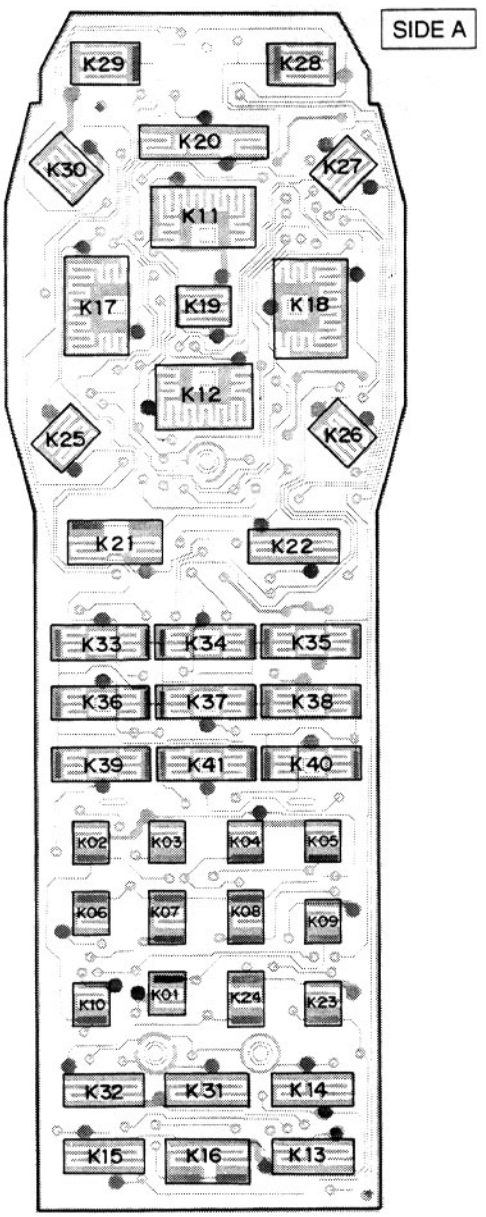
■ **Parts List**

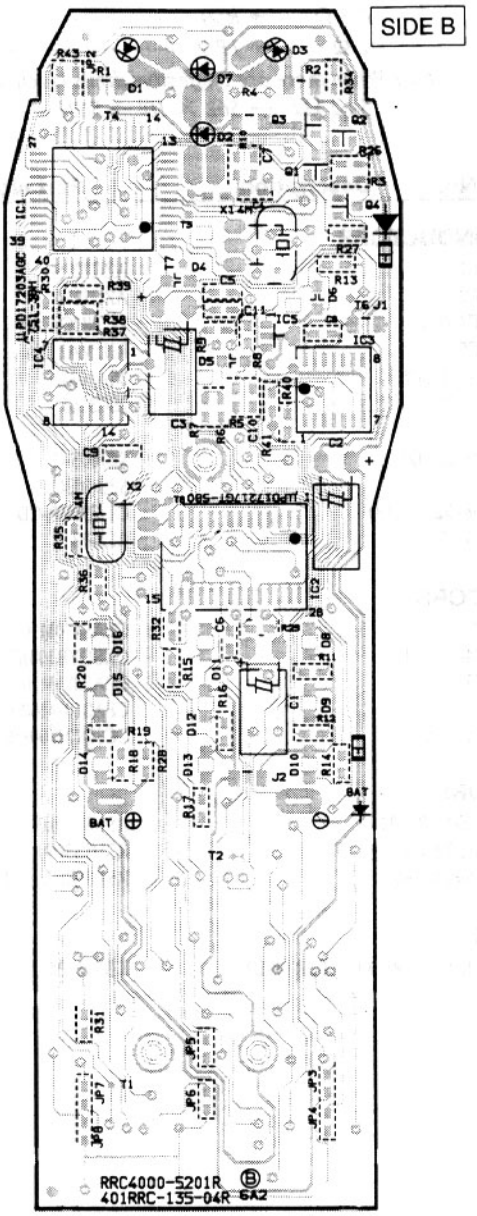
Mark	No.	Description	Part No.
	1	Filter	AZA7152
	2	Name plate	AZA7241
	3	Rubber sheet (A)	AZA7236
	4	Rubber sheet (B)	AZA7243
	5	Spring (+)	AZB7049
	6	Spring (–)	AZB7050
	7	Spring	AZB7051
	8	Screw	AZB7052
	9	Remo-con case (A)	AZN7672
	10	Remo-con case (B)	AZN7326
	11	Battery cover	AZN7327
	12	Main key (FF)	AZN7666
	13	Main key (STOP)	AZN7329
	14	Main key (REV)	AZN7665
	15	Main key (PAUSE)	AZN7331
	16	Main key (PLAY)	AZN7664
NSP	17	PCB	AZW7243

7.3.2 SCHEMATIC AND PCB DIAGRAM

NOTE: When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".




SIDE A
K29
K28
K20
K30
K27
K11
K17
K19
K18
K12
K25
K26
K21
K22
K33
K34
K35
K36
K37
K38
K39
K41
K40
K02
K03
K04
K05
K06
K07
K08
K09
K10
K01
K24
K23
K32
K31
K14
K15
K16
K13


SIDE B
RRC4000-5201R
401RRC-135-04R

7.3.3 PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 × 10¹ → 561 ..... RD1/4PU 5611 J
47 kΩ → 47 × 10³ → 473 ..... RD1/4PU 4733 J
0.5 Ω → R50 ..... RN2H R50 K
1 Ω → 1R0 ..... RS1P 1R0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 kΩ → 562 × 10¹ → 5621 ..... RN1/4PC 5621 F

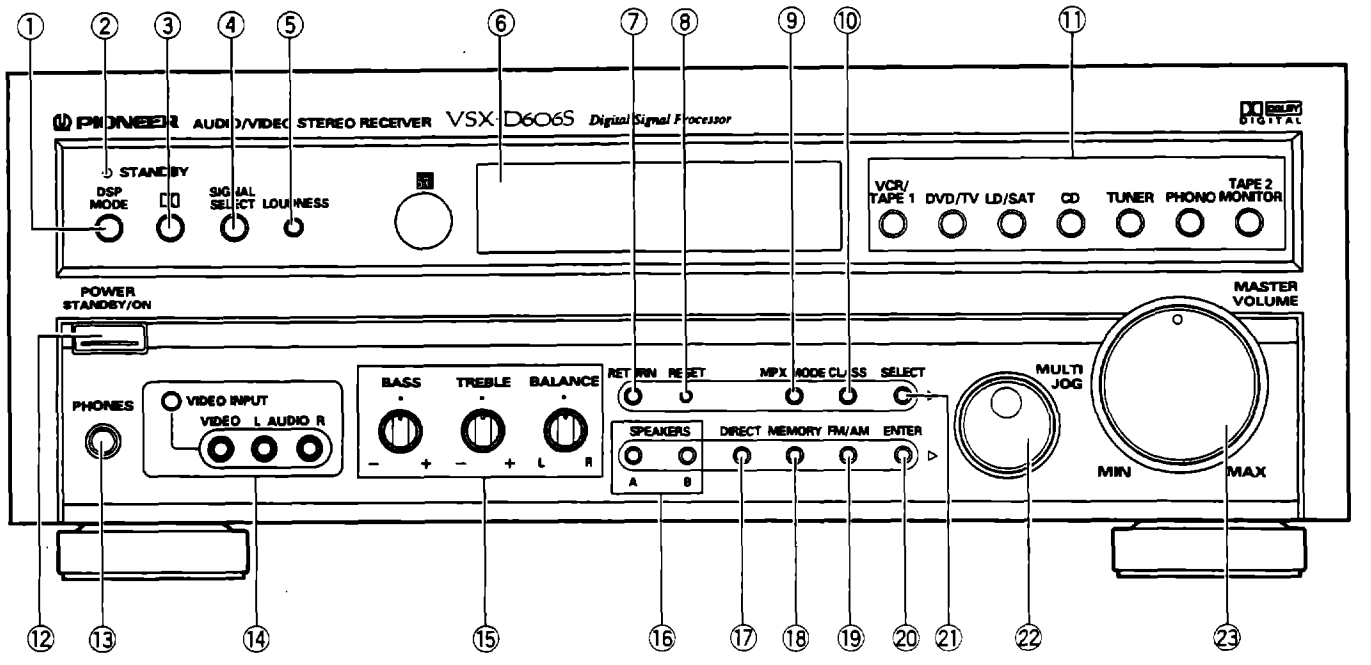
Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC1		AZC7275
	IC2		AZC7274
	IC3, IC4		TC74HC07AF
	IC5		RH5VA21AA
	Q4, Q5, Q6		2SA1037K
	Q1, Q2, Q3		2SC3265
	D1, D3, D7		SE1003-C
	D2		SPS-503C-3
	D8-D20	LED	CL-230HR-CD
	D4 - D6		RLS-73
CAPACITORS			
	C2		CEAS470M10
	C4-C7,C11		CKSQYB104K25
	C3		CEAS221M10
	C1		CEAS101M6R3
	C8 -C10		CCSQCH100J50
RESISTORS			
	R2001, R2002		RS1/8S0R0J
	R1, R2, R4		RS1/8S3R9J
	Other Resistors		RS1/10S□□□J
OTHERS			
	X1, X2	RESONATOR (4MHz)	KBR-4.0M

8. PANEL FACILITIES AND SPECIFICATIONS

NAMES OF PARTS

* The size of characters shown in the figure may differ from that on the actual product.

Front panel



① **DSP MODE button (VSX-D606S)**
② **STANDBY indicator**
③ **DD button (VSX-D606S)**
④ **SIGNAL SELECT button (VSX-D606S)**

⑤ **LOUDNESS button**
Press this button when the volume is low to raise the low and high range levels so that the sound can be heard more easily.

⑥ **Display**
⑦ **RETURN button**
⑧ **RESET button (VSX-D606S)**
⑨ **MPX MODE button**
Use to switch the auto stereo/monaural mode for receiving FM broadcasts. When the received broadcast signal is weak, press this button to set the monaural mode.

⑩ **CLASS button**
⑪ **Function buttons**
⑫ **POWER STANDBY/ON button**
⑬ **PHONES jack (Headphone terminal)**

⑭ **VIDEO INPUT button/terminal**
Connect to a video camera, etc.

⑮ **TONE and BALANCE controls**
Use to adjust tone and volume balance.

⑯ **SPEAKERS A, B buttons**
ON/OFF switches for the A and B speaker systems.

⑰ **DIRECT button (VSX-D606S)**
Use to play back sound without going through the tone and balance control circuits. DOLBY MODE, DSP MODE and LOUDNESS also turn off.

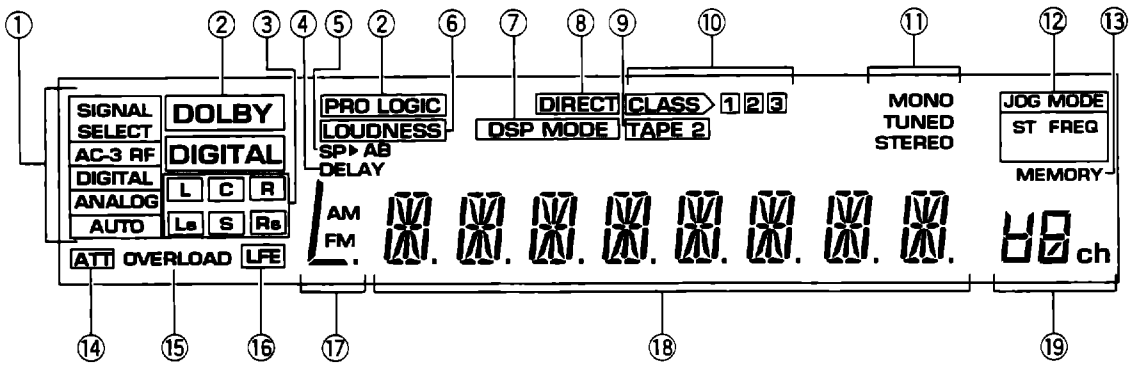
⑱ **MEMORY button**
⑲ **FM/AM button**
Use to switch the FM/AM frequency band reception.

⑳ **ENTER button**
㉑ **SELECT button**
Use to switch the control of the MULTI JOG between station mode and frequency mode when operating the tuner.

㉒ **MULTI JOG**
Use to select the frequency and station number when operating the tuner.

㉓ **MASTER VOLUME**

Display



① **SIGNAL SELECT indicators (VSX-D606S)**
The input signal format currently selected will light.

② **DOLBY DIGITAL (VSX-D606S) and PRO LOGIC indicators**
"DOLBY" lights when the Dolby mode is ON. There are two Dolby modes-Dolby Digital (AC-3) and Dolby Pro Logic. "DOLBY" and "DIGITAL" light during Dolby Digital, and "DOLBY" and "PRO-LOGIC" light when played back in Dolby Pro Logic.

③ **PROGRAM FORMAT indicators (VSX-D606S)**
When playing back in the Dolby Digital (AC-3) mode, the indicator of the channel set for the playback source lights.

④ **DELAY indicator**
Lights when the delay time is being set.

⑤ **Speakers A, B indicator**
The indicator of the speaker system (A, B) selected will light.

⑥ **LOUDNESS indicator**
Lights when LOUDNESS is ON.

⑦ **DSP MODE indicator (VSX-D606S)**
Lights when DSP MODE is selected.

⑧ **DIRECT indicator**
Lights when DIRECT is ON.

⑨ **TAPE 2 indicator**
Lights when TAPE 2 MONITOR is ON.

⑩ **CLASS 1, 2, 3 indicators**
The indicator of the class number selected lights.

⑪ **TUNER indicator**

MONO:
Lights when the monaural mode is set using the MPX MODE button.

TUNED:
Lights when broadcasts are being received.

STEREO:
Lights when stereo broadcasts are received during auto stereo mode.

⑫ **JOG MODE indicator**

ST:
Lights when the station mode is selected.

FREQ:
Lights when the frequency mode is selected.

⑬ **MEMORY indicator**
Lights when station memory is selected.

⑭ **ATT indicator (VSX-D606S)**
Lights when INPUT ATT is ON.

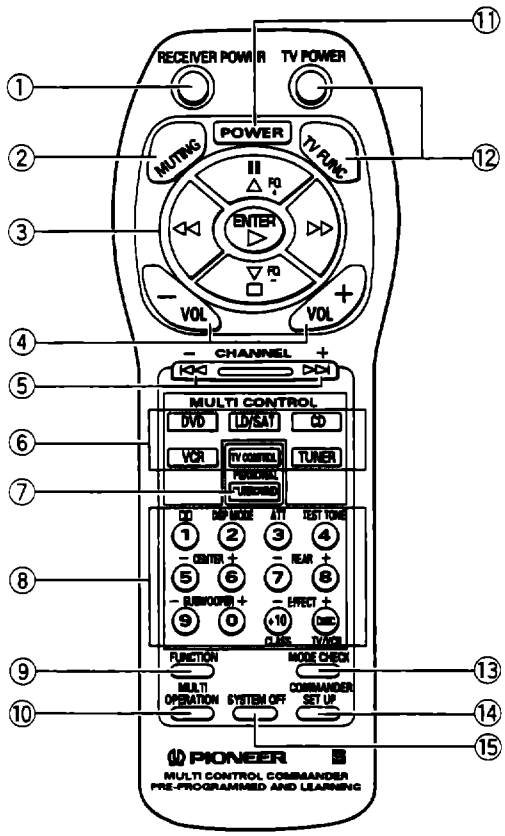
⑮ **OVERLOAD indicator (VSX-D606S)**
Lights when input level is excessive when ANALOG is selected (including AUTO) using the SIGNAL SELECT button.

⑯ **LFE indicator (VSX-D606S)**
[LFE] lights when the LFE (Low Frequency Effects) channel is set for the playback source with Dolby Digital. The [LFE] indicator also lights when LFE signals are input.

⑰ **AM/FM indicators**
The indicator of the band currently selected (AM/FM) lights.

⑱ **CHARACTER display**

⑲ **STATION display**
Indicates the station number currently selected.



① **RECEIVER POWER button**

② **MUTING button**
Press to mute the volume.

③ **[When set to SURROUND (OPERATIONS)]**
△,▽,◁,▷ (Select/Adjust)buttons
[When set to other than SURROUND (OPERATIONS)]
II(Pause), □ (Stop), ◁◁(Rewind), ▷▷(Fast Forward), ▷ (Play) buttons

④ **VOL (–, +) buttons**

⑤ **[TV Operations]**
Selects the TV broadcast channel.
[CD, LD, DVD operations]
|◁◁, ▷▷| (Chapter/Track Search) buttons

⑥ **MULTI CONTROL function buttons**
Used to set and operate the MULTI CONTROL, and switch the function.
TV CONTROL: Press to operate TV.

⑦ **SURROUND/PERSONAL button**
[When setting MULTI operations]
Press when setting to the personal mode using multi operations.
[When setting to other than multi operation]
Press when performing surround operations and setting/changing setting modes.

⑧ **Number/surround setting buttons**
[When setting surround (operations)]
DD (VSX-D606S): Turns the Dolby Mode ON/OFF.
DSP MODE (VSX-D606S): Switches the surround effects.
ATT (VSX-D606S): When turned ON when the sound is unstable due to excessive input levels, the input signal level drops so that the sound becomes easier to listen to.
TEST TONE: When turned ON (while in surround mode), volume balance adjustment signals are output in order from the speakers and can be adjusted.
CENTER –, +: Adjusts the center level.
REAR –, +: Adjusts the rear level.
SUB WOOFER –, +: Adjusts the sub woofer level.
EFFECT –, + (VSX-D606S): Adjusts DSP effects.
[Tuner Operations]
Number buttons: Use for setting the frequency value when the station call is selected or during direct access.
CLASS: Switches the CLASS number.
[VCR operations]
TV/VCR: Switches between TV/VCR.
[CD Operations]
DISC: Use to select the DISC number.

⑨ **FUNCTION button**
Switches the function.

⑩ **MULTI OPERATION button**
Use to set the multi operation.

⑪ **POWER button**
Turns ON/OFF the power of devices other than this unit.

⑫ **TV buttons**

⑬ **MODE CHECK button**

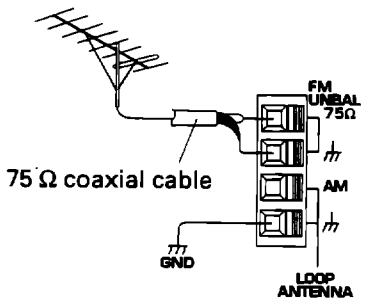
⑭ **COMMANDER SET UP button**
Use to control and learn operations of other manufacturer's equipment, and set multi operation functions.

⑮ **SYSTEM OFF button**
Use to turn OFF the power of all equipment connected to the main unit.

CONNECTING DEVICES

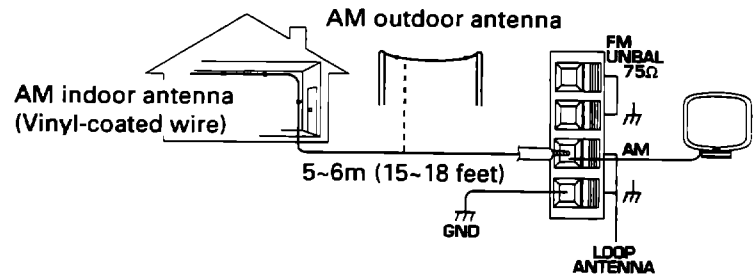
When connecting or changing equipment, be sure to turn OFF the POWER switch, and disconnect the power cord from the wall outlet.

■ For better reception of signals, use the FM external antenna.

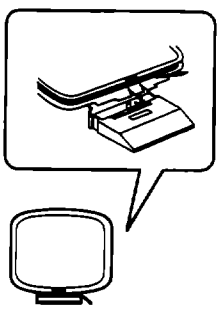


■ When AM broadcast reception is poor

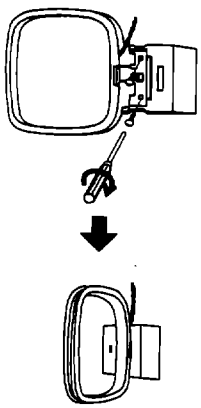
Connect a 5 to 6 meter (15~18 feet) long vinyl-coated wire to the AM antenna. If possible draw horizontally outdoors to achieve better reception.



■ Assembling the AM loop antenna



When attached on a wall, etc.



Face towards the direction with the best reception.

Stretch out fully and secure onto the wall using pins.

FM antenna

VCR

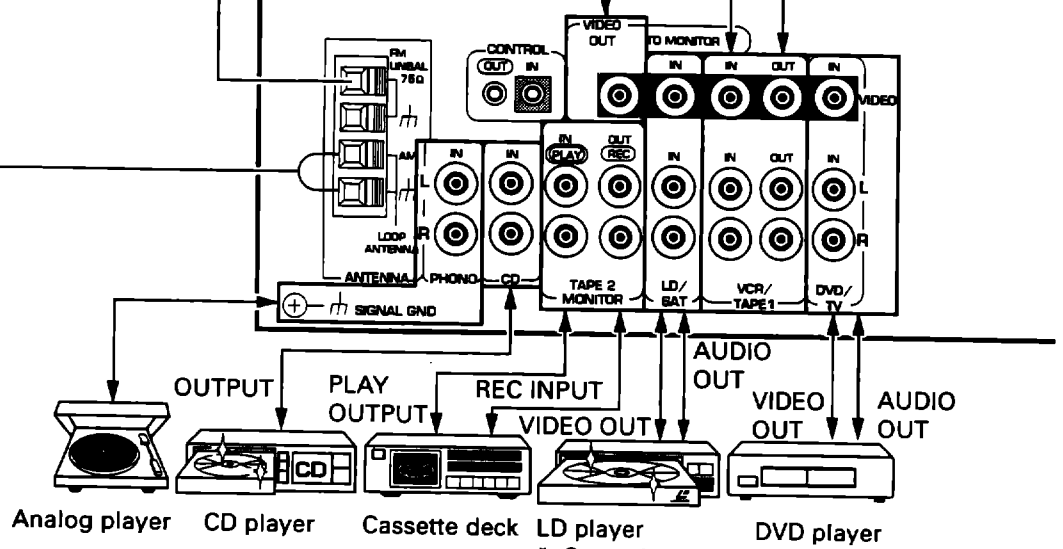
TV monitor

* Can also be connected to a cassette deck.

VIDEO IN

AUDIO/ VIDEO OUT

AUDIO/ VIDEO IN



OUTPUT

PLAY OUTPUT

REC INPUT

VIDEO OUT

AUDIO OUT

VIDEO OUT

AUDIO OUT

Analog player

CD player

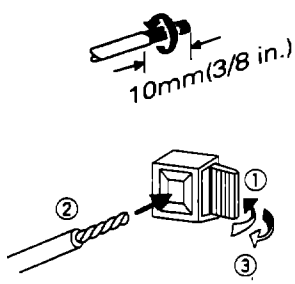
Cassette deck

LD player

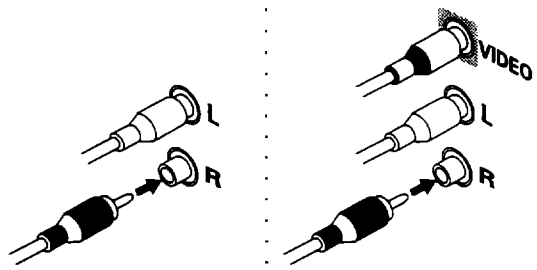
* Can also be connected to a satellite system.

DVD player

■ Antenna terminal

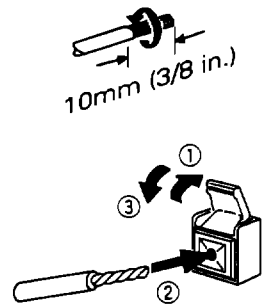


■ Input/output plug

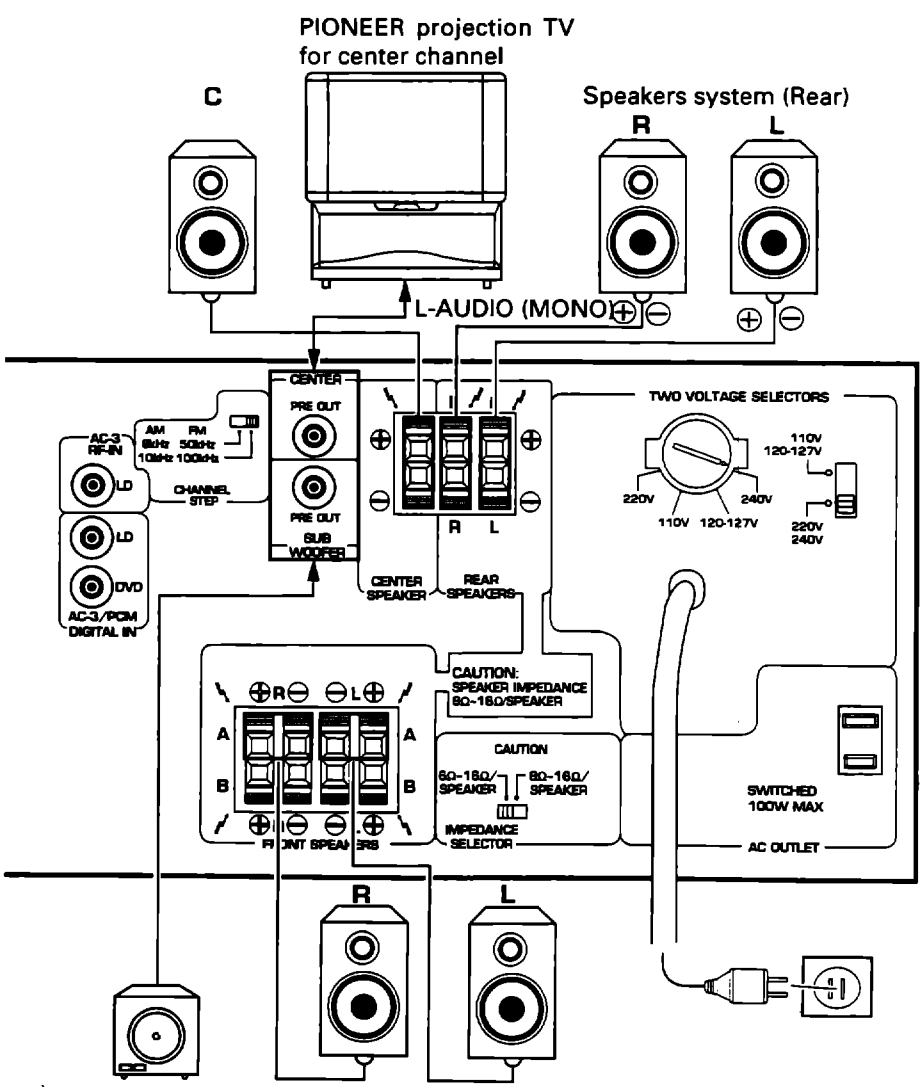


Connect the white plug to L, red plug to R, and yellow plug to VIDEO. Be sure to insert completely.

■ Speakers terminal



* The size of characters and terminal positions in the figures may differ from those on the actual product.
* The figures show the VSX-D606S multi voltage model.

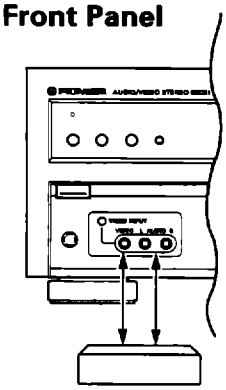


Sub woofer with built-in amplifier

Speaker system (Front)

* The sub woofer can be connected in a different way. For details, refer to the instructions on the sub woofer.

■ Front Panel



Video equipment such as video camera, etc.

memo

Use nominal impedances such as 6 Ω to 16 Ω or 8 Ω to 16 Ω for the speaker system. When using 6 Ω to 16 Ω, switch the IMPEDANCE SELECTOR to 6 Ω to 16 Ω.

SPECIFICATIONS

Amplifier Section

Continuous average power output of 100 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

[Multi-voltage model only]
Continuous Power Output (DIN)
Front (1 kHz, T.H.D. 1 %, 8 Ω)
VSX-D606S ..... 130 W + 130 W

[U.S. and Canadian models only]
Continuous Power Output
Front ..... 100 W + 100 W (1 kHz, 0.8 %, 8 Ω)
Center ..... 100 W (1 kHz, 0.8 %, 8 Ω)
Rear ..... 100 W (1 kHz, 0.8 %, 8 Ω)

Input (Sensitivity/Impedance)
PHONO MM ..... 2.8 mV/47 kΩ
LD/SAT, CD, VCR/TAPE 1, TAPE 2
DVD/TV, VIDEO ..... 200 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1kHz)
PHONO MM ..... 100 mV
Frequency Response
PHONO MM ..... 20 Hz to 20,000 Hz ± 0.3 dB
LD/SAT, CD, VCR/TAPE 1, TAPE 2
DVD/TV, VIDEO ..... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)
VCR/TAPE 1 REC, TAPE 2 REC ..... 200 mV/2.2 kΩ
Tone Control
BASS ..... ± 9 dB (100 Hz)
TREBLE ..... ± 9 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)
PHONO MM
VSX-D606S ..... 75 dB

LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV, VIDEO
VSX-D606S ..... 97 dB

Signal-to-Noise Ratio [EIA, at 1 W (1kHz)]
PHONO MM ..... 75 dB
LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV, VIDEO
VSX-D606S ..... 80 dB

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.*
** *Measured by Audio Spectrum Analyzer.*

VIDEO Section

Input (Sensitivity/Impedance)
LD/SAT, VCR, DVD/TV, VIDEO ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR REC, MONITOR TV ..... 1 Vp-p/75 Ω
Frequency Response
LD/SAT, VCR, DVD/TV, VIDEO
→ MONITOR ..... 5 Hz to 7 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio ..... 55 dB
Cross Talk ..... 55 dB

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FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono: 11.2 dBf, IHF (1.0 µV/75 Ω)
50 dB Quieting Sensitivity ..... Mono: 16.8 dBf
Stereo: 38.6 dBf
Signal-to-Noise Ratio ..... Mono: 73 dB (at 85 dBf)
Stereo: 70 dB (at 85 dBf)
Distortion ..... Stereo: 0.5 % (1kHz)
Alternate Channel Selectivity ..... 60 dB (400 kHz)
Stereo Separation ..... 40 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (± 1) dB
Antenna Input ..... 75 Ω unbalanced

AM Tuner Section

Frequency Range ..... 531 kHz to 1,602 kHz (9 kHz step)
530 kHz to 1,700 kHz (10 kHz step)
Sensitivity (IHF, Loop antenna) ..... 350 µV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous

Power Requirements
U.S. and Canadian models ..... AC 120 V, 60 Hz
Multi-voltage model ..... AC 110 V/120-127 V/220 V/240 V (Switchable), 50/60 Hz
Power Consumption
U.S. and Canadian models
VSX-D606S ..... 280 W, 400 VA

Multi-voltage model
VSX-D606S ..... 295 W

In Standby Condition ..... 2.5 W
AC Outlet (Multi-voltage, U.S. and Canadian models only)
U.S. and Canadian models
SWITCHED ..... 100 W (0.8 A) MAX
Multi-voltage model
SWITCHED ..... 100 W MAX
Dimensions
VSX-D606S ..... 420 (W) × 160 (H) × 374 (D) mm
16-9/16 (W) × 6-5/16 (H) × 14-3/4 (D) in

Weight (without package)
VSX-D606S
U.S. and Canadian models ..... 9.4 kg (20 lb 12 oz)
Multi-voltage model ..... 9.8 kg (21 lb 10 oz)

Furnished Parts

FM Antenna 1
AM Loop Antenna 1
Dry Cell Batteries (AA/LR6) 2
Remote Control Unit 1
Operating Instructions 1
Sub instruction manual (Remote Control Unit) 1
Sub instruction manual [Dolby Digital (AC-3)] 1

NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.